```
Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766
```

```
RESULT 33
AAR54613
ID   AAR54613 standard; protein; 739 AA.
XX
AC   AAR54613;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1994  (first entry)
XX
DE   Delta24-34 CD26.
XX
KW   Human; T cell activation antigen; CD26; analogues; deletion; soluble;
KW   signal peptidase; immune-stimulating; response-stimulating; AIDS;
KW   immunosuppression; AIDS-related complex.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 23. .24
FT                   /note= "Position of delta24-34 deletion"
XX
PN   WO9409132-A1.
XX
PD   28-APR-1994.
XX
PF   19-AUG-1993;   93WO-US007923.
XX
PR   21-AUG-1992;   92US-00934162.
XX
PA   (DAND ) DANA FARBER CANCER INST INC.
XX
PI   Morimoto C,  Schlossman S,  Tanaka T;
XX
DR   WPI; 1994-151317/18.
XX
PT   Polypeptide fragments and analogues of CD26 and encoding nucleic acid -
PT   useful for stimulating immune response, e.g. for treatment of AIDS to
PT   counteract immunosuppressive drug, and as vaccine adjuvant.
XX
PS   Claim 4; Page 52-54; 85pp; English.
XX
CC   The sequences given in AAR54612-14 represents analogues of the human T
CC   cell activation antigen CD26 which have internal deletions. The analogues
CC   pref. lack residues 3-9 or 24-34. These analogues are soluble under
CC   physiological conditions and lack enough amino acid residues to render
CC   them susceptible to cleavage by signal peptidase. The peptide fragments
CC   and analogues are useful as immune or response- stimulating therapeutics,
CC   eg. they may be used for treatment of disease conditions characterised by
CC   immunosuppression, eg. AIDS or AIDS-related complex, other virally or
CC   environmentally-induced conditions, and certain congenital immune
CC   deficiencies. The peptides can be employed to increase immune function
CC   which has been impaired by use of immunosupressive drugs, such as certain
CC   chemotherapeutic drugs. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 739 AA;
```

```
  Query Match           95.5%;  Score 3841;  DB 2;  Length 739;
  Best Local Similarity   97.7%;  Pred. No. 0;
  Matches  711;  Conservative    0;  Mismatches    1;  Indels   16;  Gaps    1;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              |||||||||||||||||||||||||||||||||||||||||||| ||||||||||||||||
Db         28 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNIEYGNSSVFLENSTFDEF 87

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         88 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 147

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        148 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 207

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        208 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 267

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        268 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 327

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        328 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 387

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        388 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 447

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        448 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 507

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        508 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 567

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        568 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 627

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        628 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 687

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||  ||||||||||||||||||||||||||||||
Db        688 EYLLIHGTADDNVHFQ----------QAMWYTDEDHGIASSTAHQHIYTHMSHF 731

Qy        733 IKQCFSLP 740
              ||||||||
Db        732 IKQCFSLP 739
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Search completed: February 17, 2006, 20:41:02
Job time : 200 secs
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                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
                 |||||||||||||||||||||||||||||||||||| ||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADIVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
                 ||||||||||||||||||||||:|||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYESVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
                 ||||||||
Db        759 IKQCFSLP 766


RESULT 32
AAR54611
ID   AAR54611 standard; protein; 766 AA.
XX
AC   AAR54611;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1994  (first entry)
XX
DE   Native CD26.
XX
KW   Human; T cell activation antigen; CD26; analogues; deletion; soluble;
KW   signal peptidase; immune-stimulating; response-stimulating; AIDS;
KW   immunosuppression; AIDS-related complex.
XX
OS   Homo sapiens.
XX
PN   WO9409132-A1.
XX
PD   28-APR-1994.
XX
PF   19-AUG-1993;   93WO-US007923.
XX
PR   21-AUG-1992;   92US-00934162.
XX
PA   (DAND ) DANA FARBER CANCER INST INC.
XX
PI   Morimoto C,  Schlossman S,  Tanaka T;
XX
DR   WPI; 1994-151317/18.
DR   N-PSDB; AAQ63261.
XX
PT   Polypeptide fragments and analogues of CD26 and encoding nucleic acid -
PT   useful for stimulating immune response, e.g. for treatment of AIDS to
PT   counteract immunosuppressive drug, and as vaccine adjuvant.
XX
PS   Disclosure; Page 46-49; 85pp; English.
XX
CC   This sequence represents the human T cell activation antigen CD26. The
CC   invention is concerned with polypeptide fragments and analogues of CD26
CC   which have internal deletions (see also AAR54612-14). The analogues pref.
CC   lack residues 3-9 or 24-34. These analogues are soluble under
CC   physiological conditions and lack enough amino acid residues to render
CC   them susceptible to cleavage by signal peptidase. The peptide fragments
CC   and analogues are useful as immune or response- stimulating therapeutics,
CC   eg. they may be used for treatment of disease conditions characterised by
CC   immunosuppression, eg. AIDS or AIDS-related complex, other virally or
CC   environmentally-induced conditions, and certain congenital immune
CC   deficiencies. The peptides can be employed to increase immune function
CC   which has been impaired by use of immunosupressive drugs, such as certain
CC   chemotherapeutic drugs. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 766 AA;

  Query Match             97.7%;  Score 3928;  DB 2;  Length 766;
  Best Local Similarity   99.9%;  Pred. No. 0;
  Matches  727;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||| ||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDWTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578
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PF 08-JAN-2004; 2004WO-US000368.
XX
PR 08-JAN-2003; 2003US-0438735P.
XX
PA (BRIM) BRISTOL-MYERS SQUIBB CO.
XX
PI Amler LC, Januario T;
XX
DR WPI; 2004-544114/52.
DR N-PSDB; ADQ80241.
XX
PT Identifying a mammal that will respond therapeutically to a method of
PT treating cancer comprises comparing the level of a biomarker in a mammal
PT before and after exposure to an epidermal growth factor receptor (EFGR)
PT modulator.
XX
PS Disclosure; SEQ ID NO 137; 520pp; English.
XX
CC The invention relates to a method of identifying a mammal that will
CC respond therapeutically to a method of treating cancer by administering
CC an epidermal growth factor receptor (EGFR) modulator by comparing the
CC level of a biomarker in a mammal before and after exposure to an EGFR
CC modulator. The method comprises: (a) measuring, in the mammal, the level
CC of at least one biomarker identified in the specification; (b) exposing
CC the mammal to the EGFR modulator; and (c) measuring in the mammal the
CC level of the biomarker, where a difference in the level in step (c)
CC compared to step (a) indicates that the mammal will respond
CC therapeutically to the method of treating cancer. The method and
CC biomarkers are useful for identifying a mammal that will respond
CC therapeutically to a method of treating cancer by administering an
CC epidermal growth factor receptor (EGFR) modulator. This sequence
CC corresponds to one of the biomarkers whose levels of expression is
CC measured in the method of the invention.
XX
SQ Sequence 766 AA;

Query Match 97.7%; Score 3929; DB 8; Length 766;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 726; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```
Qy          13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy          73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy         133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy         193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy         253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy         313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy         373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy         433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy         493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
               ||||||||||||||||||||||||||||||||||||||||| ||||||||||||||||||||
Db         519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADIVFRLNWATYLASTENIIVASP 578

Qy         553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy         613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
               |||||||||||||||||||||||:|||||||||||||||||||||||||||||||||||
Db         639 VLGSGSGVFKCGIAVAPVSRWEYYESVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy         673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy         733 IKQCFSLP 740
               ||||||||
Db         759 IKQCFSLP 766
```

RESULT 31
AEB77579
ID AEB77579 standard; protein; 766 AA.
XX
AC AEB77579;
XX
DT 06-OCT-2005 (first entry)
XX
DE Human dipeptidyl peptidase IV enzyme - SEQ ID 1.
XX
KW autism; nootropic; asperger syndrome; enzyme; dipeptidyl peptidase IV.
XX
OS Homo sapiens.
XX
PN US2005170333-A1.
XX
PD 04-AUG-2005.
XX
PF 03-FEB-2004; 2004US-00770712.
XX
PR 03-FEB-2004; 2004US-00770712.
XX
PA (VOJD/) VOJDANI A.
XX
PI Vojdani A;
XX
DR WPI; 2005-562713/57.
XX
PT Determining etiology of autistic spectrum disorder in patient, by
PT determining level of infectious agent/toxic chemical/dietary protein
PT derived antigen in samples of patient, comparing it with normal level of
PT antigens of control subjects.
XX
PS Disclosure; SEQ ID NO 1; 89pp; English.
XX
CC The invention comprises a method of determining etiology of an autistic
CC spectrum disorder in a patient. The method involves determining the level
CC of an infectious agent, toxic chemical, or dietary protein derived
CC antigen, or their antibodies in samples of patient, and comparing
CC antigens/antibodies levels with normal levels of antigens/antibodies from
CC control subjects. The method of the invention is useful for determining
CC the etiology of an autistic spectrum disorder, such as autism, pervasive
CC development disorder and Asperger's syndrome. The present amino acid
CC sequence represents a human dipeptidyl peptidase IV enzyme that was used
CC in the exemplification of the invention.
XX
SQ Sequence 766 AA;

Query Match 97.7%; Score 3929; DB 9; Length 766;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 726; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```
Qy          13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
```

```
Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766


RESULT 29
ABP55629
ID   ABP55629 standard; protein; 766 AA.
XX
AC   ABP55629;
XX
DT   20-FEB-2003  (first entry)
XX
DE   Human dpp4 protein sequence.
XX
KW   DPP10; dipeptidyl peptidase; prolyloligopeptidase; enzyme; asthma;
KW   antiinflammatory; antiasthmatic; antipsoriatic; antiarthritic;
KW   antirheumatic; vaccine; gene therapy; inflammatory disease;
KW   inflammatory bowel disease; atopy; rheumatoid arthritis; psoriasis;
KW   chromosome 2q14.
XX
OS   Homo sapiens.
XX
PN   WO200286113-A2.
XX
PD   31-OCT-2002.
XX
PF   24-APR-2002; 2002WO-GB001887.
XX
PR   24-APR-2001; 2001GB-00010044.
PR   24-APR-2001; 2001GB-00010046.
PR   12-OCT-2001; 2001GB-00024575.
PR   12-OCT-2001; 2001GB-00024594.
XX
PA   (ISIS-) ISIS INNOVATIONS LTD.
XX
PI   Cookson WOCM,  Moffat MF,  Allen M,  Lench N;
XX
DR   WPI; 2003-093132/08.
XX
PT   New nucleic acid sequence comprising DPP10 mRNA, useful for the
PT   manufacture of a medicament for regulating DPP10 protein expression or
PT   for preventing or treating inflammatory disease e.g., inflammatory bowel
PT   disease.
XX
PS   Example 2; Fig 23; 321pp; English.
XX
CC   The present invention describes a new isolated nucleic acid sequence (I)
CC   comprising a DPP10 mRNA sequence. DPP10 is a dipeptidyl peptidase (also
CC   known as prolyloligopeptidase). (I) has antiinflammatory, antiasthmatic,
CC   antipsoriatic, antiarthritic and antirheumatic activities, and can be
CC   used in vaccines and gene therapy. A composition comprising (I) can be
CC   used for the manufacture of a medicament for regulating DPP10 expression
CC   or for preventing or treating inflammatory disease e.g., inflammatory
CC   bowel disease, asthma, atopy, rheumatoid arthritis or psoriasis. (I) can
CC   also be used in an assay for detecting or measuring DPP10 in a sample. A
CC   host cell comprising (I) can be used for producing recombinant DPP10 gene
CC   products, or in drug screening systems to identify agents for diagnosis
CC   or treatment of individuals having or susceptible to inflammatory
CC   disease. Human DPP10 is located on chromosome 2, more specifically
CC   chromosome 2q14. ABQ84254 to ABQ84612 and ABP55569 to ABP55629 represent
CC   sequences used in the exemplification of the present invention
XX
SQ   Sequence 766 AA;

  Query Match             97.7%;  Score 3929;  DB 6;  Length 766;
  Best Local Similarity   99.7%;  Pred. No. 0;
  Matches  726;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              |||||||||||||||||||||||||||||||||| ||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADIVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||:|||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYESVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766


RESULT 30
ADQ80365
ID   ADQ80365 standard; protein; 766 AA.
XX
AC   ADQ80365;
XX
DT   21-OCT-2004  (first entry)
XX
DE   Dipeptidylpeptidase IV protein.
XX
KW   cytostatic; epidermal growth factor receptor modulator; identification;
KW   therapeutic response; cancer; EGFR; biomarker.
XX
OS   Homo sapiens.
XX
PN   WO2004063709-A2.
XX
PD   29-JUL-2004.
XX
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                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
                ||||||||||||||||||||||||||||||||||| ||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLIDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
                ||||||||
Db        759 IKQCFSLP 766
```

RESULT 28
ADO19400
ID ADO19400 standard; protein; 766 AA.
XX
AC ADO19400;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human PRO polypeptide #165.
XX
KW Human; PRO; immune related disorder; systemic lupus erythematosus;
KW rheumatoid arthritis; osteoarthritis; juvenile chronic arthritis;
KW systemic sclerosis; Sjogren's syndrome; vasculitis; sarcoidosis;
KW autoimmune haemolytic anaemia; autoimmune thrombocytopenia; thyroiditis;
KW diabetes mellitus; renal disease; demyelinating disease;
KW central nervous system; peripheral nervous system;
KW demyelinating polyneuropathy; Guillain-Barre syndrome;
KW chronic inflammatory demyelinating polyneuropathy.
XX
OS Homo sapiens.
XX
PN WO2004043361-A2.
XX
PD 27-MAY-2004.
XX
PF 06-NOV-2003; 2003WO-US035268.
XX
PR 08-NOV-2002; 2002US-0425235P.
XX
PA (GETH) GENENTECH INC.
XX
PI Fong S, Dennis K, Clark H, Chiu H, Schoenfeld J, Williams PM;
PI Wood WI, Wu TD;
XX
DR WPI; 2004-420067/39.
DR N-PSDB; ADO19399.
XX
PT Novel PRO polypeptide e.g., PRO69614, PRO71106, or PRO86388 useful for
PT treating an immune related disorder such as systemic lupus erythematosus,
PT rheumatoid arthritis, osteoarthritis, juvenile chronic arthritis or
PT spondyloarthropathy.
XX
PS Claim 7; SEQ ID NO 330; 1731pp; English.
XX
CC The invention relates to human PRO polypeptides and the polynucleotides
CC encoding them. The polypeptides and polynucleotides are useful for
CC treating and diagnosing immune related disorders in mammals. The immune
CC related disorders include systemic lupus erythematosus, rheumatoid
CC arthritis, osteoarthritis, juvenile chronic arthritis, systemic
CC sclerosis, Sjogren's syndrome, vasculitis, sarcoidosis, autoimmune
CC haemolytic anaemia, autoimmune thrombocytopenia, thyroiditis, diabetes
CC mellitus, immune-mediated renal disease, demyelinating diseases of the
CC central or peripheral nervous system, demyelinating polyneuropathy,
CC Guillain-Barre syndrome and chronic inflammatory demyelinating
CC polyneuropathy. This sequence represents a human PRO polypeptide of the
CC invention.
XX
SQ Sequence 766 AA;

```
  Query Match             97.8%;  Score 3933;  DB 8;  Length 766;
  Best Local Similarity   99.9%;  Pred. No. 0;
  Matches  727;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              ||||||||||||||||||||||||||||||||||| ||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLIDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy.       553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698
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```
Qy          73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy         133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy         193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy         253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy         313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy         373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
               ||||||||||||||||||||||||||||||||||| ||||||||||||||||||||||||
Db         399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLIDYTKVTCLSCELNPERCQYYS 458

Qy         433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy         493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy         553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy         613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy         673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy         733 IKQCFSLP 740
               ||||||||
Db         759 IKQCFSLP 766
```

RESULT 27
ADN39604
ID ADN39604 standard; protein; 766 AA.
XX
AC ADN39604;
XX
DT 17-JUN-2004 (first entry)
XX
DE Cancer/angiogenesis/fibrosis-related polypeptide, SEQ ID NO:A204.
XX
KW Human; differential expression; cancer; angiogenic disorder;
KW fibrotic disorder; psoriasis; ischaemia; heart disease; atherosclerosis;
KW inflammatory disease; autoimmune disease;
KW retinal neovascularistaion syndrome; scarring; uterine fibroid;
KW detection; diagnosis; prognosis; drug screening; drug targeting;
KW wound healing; contraception; cytostatic; cardiant; immunomodulatory;
KW vulnerary; gene therapy; vaccine.
XX
OS Homo sapiens.
XX
PN WO2003042661-A2.
XX
PD 22-MAY-2003.
XX
PF 13-NOV-2002; 2002WO-US036810.
XX
PR 13-NOV-2001; 2001US-0350666P.
PR 21-NOV-2001; 2001US-0332464P.
PR 29-NOV-2001; 2001US-0334393P.
PR 03-DEC-2001; 2001US-0335394P.
PR 14-DEC-2001; 2001US-0340376P.
PR 08-JAN-2002; 2002US-0347211P.
PR 10-JAN-2002; 2002US-0347349P.
PR 08-FEB-2002; 2002US-0355250P.
PR 13-FEB-2002; 2002US-0356714P.
PR 20-FEB-2002; 2002US-0359077P.
PR 29-MAR-2002; 2002US-0368809P.
PR 04-APR-2002; 2002US-0370110P.
PR 12-APR-2002; 2002US-0372246P.
PR 05-JUN-2002; 2002US-0386614P.
PR 16-JUL-2002; 2002US-0396839P.
PR 22-JUL-2002; 2002US-0397775P.
PR 22-JUL-2002; 2002US-0397845P.
PR 09-SEP-2002; 2002US-0409450P.
XX
PA (EOSB-) EOS BIOTECHNOLOGY INC.
XX
PI Afar D, Aziz N, Ginsburg WM, Gish KC, Glynne R, Hevezi PA;
PI Mack DH, Murray R, Watson SR, Wilson KE, Zlotnik A;
XX
DR WPI; 2003-468649/44.
DR N-PSDB; ADN39603.
XX
PT Determining the presence or absence of a pathological cell in a patient,
PT useful for diagnosing, prognosing or treating cancer, comprises detecting
PT a nucleic acid in a biological sample.
XX
PS Claim 12; SEQ ID NO A204; 1385pp; English.
XX
CC The invention relates to nucleic acids and proteins (ADN38683-ADN40064)
CC whose expression is upregulated or downregulated in specific cancers or
CC other diseases such as angiogenic or fibrotic disorders, and to methods
CC of determining the presence or absence of a pathological cell in a
CC patient by detecting a nucleic acid at least 80% identical to those of
CC the invention or by detecting a polypeptide of the invention. The
CC invention also relates to expression vectors and host cells comprising a
CC nucleic acid of the invention; antibodies which specifically bind a
CC polypeptide of the invention; use of such antibodies for drug targeting;
CC and methods of screening for modulators of activity or expression of the
CC polypeptides and nucleic acids. The nucleic acids, polypeptides,
CC antibodies and methods are useful for diagnosing, prognosing and treating
CC cancer and other conditions such as psoriasis, ischaemia, heart disease,
CC atherosclerosis, inflammatory diseases, autoimmune diseases, retinal
CC neovascularistaion syndromes, scarring and uterine fibroids. They may
CC also be useful in wound healing and in contraception. The present
CC sequence represents a polypeptide of the invention.
XX
SQ Sequence 766 AA;

Query Match 97.8%; Score 3933; DB 7; Length 766;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 727; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy          13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy          73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy         133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy         193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
```

```
CC   antidiabetic, hypotensive, nephrotropic, antiarthritic and
CC   antiinflammatory activities, and can be used in gene therapy. (M1) is
CC   useful in targeting pharmaceuticals or other therapeutics to specific
CC   tissues using tissue-specific endothelial membrane proteins. A
CC   therapeutic complex may be used to treat or diagnose any disease for
CC   which a tissue- or organ-specific treatment would be efficacious, such as
CC   in cases of infections (e.g. bacterial, viral, fungal and parasitic),
CC   epilepsy, schizophrenia, cancer, Parkinson's disease, Alzheimer's
CC   disease, asthma, diabetes, hypertension, polycystic kidney disease,
CC   arthritis, and inflammatory bowel disease. The present sequence
CC   represents a human liver dipeptidyl peptidase IV (DPP4), which is used in
CC   an example from the present invention
XX
SQ   Sequence 766 AA;

  Query Match             97.8%;  Score 3933;  DB 6;  Length 766;
  Best Local Similarity   99.9%;  Pred. No. 0;
  Matches  727;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              |||||||||||||||||||||||||||||||||| ||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLIDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766


RESULT 26
ADD14045
ID   ADD14045 standard; protein; 766 AA.
XX
AC   ADD14045;
XX
DT   01-JAN-2004  (first entry)
XX
DE   Human src biomarker polypeptide SEQ ID NO:234.
XX
KW   predictor set; protein tyrosine kinase activity modulator;
KW   protein tyrosine kinase pathway; protein tyrosine kinase; cytostatic;
KW   gene therapy; drug sensitivity; genetic profile; cancer; human.
XX
OS   Homo sapiens.
XX
PN   WO2003062395-A2.
XX
PD   31-JUL-2003.
XX
PF   17-JAN-2003; 2003WO-US001981.
XX
PR   18-JAN-2002; 2002US-0350061P.
XX
PA   (BRIM ) BRISTOL-MYERS SQUIBB CO.
XX
PI   Huang F,  Fairchild CR,  Lee FY,  Shaw P;
XX
DR   WPI; 2003-636735/60.
DR   N-PSDB; ADD14640.
XX
PT   New polynucleotides and polypeptides for predicting the activity of
PT   compounds that interact with protein tyrosine kinases and/or protein
PT   tyrosine kinase pathways.
XX
PS   Claim 10; SEQ ID NO 234; 139pp; English.
XX
CC   The present invention describes a predictor set comprising a plurality of
CC   polynucleotides or polypeptides whose expression pattern is predictive of
CC   the response of cells to treatment with a compound that modulates protein
CC   tyrosine kinase activity or members of the protein tyrosine kinase
CC   pathway. Also described: (1) predicting whether a compound is capable of
CC   modulating the activity of cells, comprising obtaining a sample of cells,
CC   determining whether the cells express a plurality of markers, and
CC   correlating the expression of the markers to the compound's ability to
CC   modulate the activity of the cells; (2) a plurality of cell lines for
CC   identifying polynucleotides and polypeptides whose expression levels
CC   correlate with compound sensitivity or resistance of cells associated
CC   with a disease state; and (3) identifying polynucleotides and
CC   polypeptides that predict compound sensitivity or resistance of cells
CC   associated with a disease state, comprising subjecting the plurality of
CC   cell lines to one or more compounds, analysing the expression pattern of
CC   a microarray of polynucleotides or polypeptides, and selecting
CC   polynucleotides or polypeptides that predict the sensitivity or
CC   resistance of cells associated with a disease state by using the
CC   expression pattern of the microarray. The polynucleotides and
CC   polypeptides have cytostatic activities, and can be used in gene therapy.
CC   The polynucleotides and polypeptides are useful in predicting the
CC   activity of compounds that interact with protein tyrosine kinases and/or
CC   protein tyrosine kinase pathways. These may be used in determining drug
CC   sensitivity in patients to allow the development of individualized
CC   genetic profiles which aid in treating diseases and disorders (e.g.
CC   cancer) based on patient response at a molecular level. The present
CC   sequence is used in the exemplification of the present invention.
XX
SQ   Sequence 766 AA;

  Query Match             97.8%;  Score 3933;  DB 7;  Length 766;
  Best Local Similarity   99.9%;  Pred. No. 0;
  Matches  727;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98
```

PD 01-AUG-2002.
XX
PF 31-OCT-2001; 2001WO-US045643.
XX
PR 31-OCT-2000; 2000US-0244524P.
XX
PA (UYVA-) UNIV VANDERBILT.
XX
PI Brown NJ;
XX
DR WPI; 2002-627422/67.
DR N-PSDB; AAL44351.
XX
PT Diagnosing susceptibility to developing an angiotensin converting enzyme
PT (ACE) inhibitor- or a vasopeptidase inhibitor-associated angioedema, by
PT measuring levels of dipeptidyl peptidase IV or aminopeptidase P enzyme
PT activities.
XX
PS Disclosure; Page 62-64; 71pp; English.
XX
CC The invention comprises a method of identifying a subject that is
CC susceptible to developing angiodemic conditions during a course of
CC treatment. The method of the invention involves administering an
CC angiotensin converting enzyme (ACE) inhibitor or a vasopeptidase
CC inhibitor and determining dipeptidyl peptidase IV (DPP IV) enzyme
CC activity or aminopeptidase P (APP) enzyme activity. The method of the
CC invention is useful for identifying/diagnosing susceptibility to
CC developing angiodemic conditions during a course of treatment involving
CC the administration of an ACE inhibitor or a vasopeptidase inhibitor. The
CC method is particularly useful during the treatment of a subject that is
CC in need of or taking an ACE inhibitor and/or a vasopeptidase inhibitor,
CC which are commonly used in the treatment of hypertension, diabetes,
CC cardiac disease and renal diseases. The present amino acid sequence
CC represents the human dipeptidyl peptidase IV (DPP IV)
XX
SQ Sequence 766 AA;

Query Match 97.8%; Score 3933; DB 5; Length 766;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 727; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQPFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQPFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              |||||||||||||||||||||||||||||||||| ||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLIDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766
```

RESULT 25
ABP56700
ID ABP56700 standard; protein; 766 AA.
XX
AC ABP56700;
XX
DT 27-MAR-2003 (first entry)
XX
DE Human liver dipeptidyl peptidase IV (DPP4) protein SEQ ID NO:7.
XX
KW Tissue-specific endothelial membrane protein; antibacterial; virucide;
KW fungicide; antiparasitic; anticonvulsant; neuroleptic; cytostatic;
KW antiparkinsonian; nootropic; neuroprotective; antiasthmatic; infection;
KW antidiabetic; hypotensive; nephrotropic; antiarthritic; antiinflammatory;
KW gene therapy; epilepsy; schizophrenia; cancer; Parkinson's disease;
KW Alzheimer's disease; asthma; diabetes; hypertension; arthritis;
KW polycystic kidney disease; tissue-specific luminally expressed protein;
KW inflammatory bowel disease; enzyme.
XX
OS Homo sapiens.
XX
PN WO2002100336-A2.
XX
PD 19-DEC-2002.
XX
PF 07-JUN-2002; 2002WO-US018185.
XX
PR 08-JUN-2001; 2001US-0297021P.
PR 12-JUL-2001; 2001US-0305117P.
XX
PA (TARG-) TARGET PROTEIN TECHNOLOGIES INC.
XX
PI Roben PW, Stevens AC;
XX
DR WPI; 2003-167367/16.
DR N-PSDB; ABZ22557.
XX
PT Delivering a therapeutic agent (e.g. immunosuppressant) to a specific
PT tissue, comprises administering an amount of a therapeutic complex
PT comprising a therapeutic group, a ligand that binds to a tissue-specific
PT protein, and a linker.
XX
PS Example 2; Page 106-107; 123pp; English.
XX
CC The present invention describes a method (M1) for delivering a
CC therapeutic agent to a specific tissue, comprising administering an
CC amount of a therapeutic complex comprising a ligand which binds to a
CC tissue-specific luminally expressed protein, a therapeutic group, and a
CC linker which links the group to the ligand. Tissue-specific endothelial
CC membrane proteins from the present invention can have antibacterial,
CC virucide, fungicide, antiparasitic, anticonvulsant, neuroleptic,
CC cytostatic, antiparkinsonian, nootropic, neuroprotective, antiasthmatic,

```
Db        669 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 728

Qy        733 IKQCFSLP 740
              ||||||||
Db        729 IKQCFSLP 736


RESULT 23
ABG61910
ID   ABG61910 standard; protein; 766 AA.
XX
AC   ABG61910;
XX
DT   15-AUG-2002  (first entry)
XX
DE   Prostate cancer-associated protein #111.
XX
KW   Prostate cancer; prostate tumour tissue; human; mammal; cytostatic.
XX
OS   Mammalia.
XX
PN   WO200230268-A2.
XX
PD   18-APR-2002.
XX
PF   12-OCT-2001; 2001WO-US032045.
XX
PR   13-OCT-2000; 2000US-00687576.
PR   08-DEC-2000; 2000US-00733288.
PR   08-DEC-2000; 2000US-00733742.
PR   24-JAN-2001; 2001US-0263957P.
PR   16-MAR-2001; 2001US-0276791P.
PR   16-MAR-2001; 2001US-0276888P.
PR   06-APR-2001; 2001US-0281922P.
PR   24-APR-2001; 2001US-0286214P.
PR   30-APR-2001; 2001US-00847046.
PR   04-MAY-2001; 2001US-0288589P.
XX
PA   (EOSB-) EOS BIOTECHNOLOGY INC.
XX
PI   Gish KC,  Mack DH,  Wilson KE,  Afar D,  Hevezi P;
XX
DR   WPI; 2002-471335/50.
DR   N-PSDB; ABK92227.
XX
PT   Detecting a prostate cancer-associated transcript in a cell in a patient,
PT   useful for diagnosing prostate cancer (PC) or screening modulators of PC,
PT   by determining if prostate cancer-associated genes are expressed in a
PT   prostate tissue.
XX
PS   Claim 27; Page 393; 436pp; English.
XX
CC   The present invention relates to methods of detecting a prostate cancer-
CC   associated transcript in a cell from a patient. The method comprises
CC   contacting a biological sample from the patient with prostate cancer-
CC   associated polynucleotides (designated PC genes) that selectively
CC   hybridise to a sequence that is at least 80% identical to them. The
CC   prostate cancer-associated polynucleotide sequences are differentially
CC   expressed in prostate tumour tissue or in prostate cancer and are derived
CC   from the tissues of various organisms such as humans or other mammals
CC   (e.g. mice, sheep and dogs). The methods of the invention are useful for
CC   diagnosing and treating prostate cancer in mammals. The prostate cancer-
CC   associated genes are useful for diagnosing or treating prostate cancer,
CC   as well as for identifying modulators of prostate cancer or agents that
CC   inhibit prostate cancer. The nucleic acid sequences are particularly
CC   useful in gene therapy, as a vaccine or in antisense applications.
CC   ABG61800-ABG61944 represent prostate cancer-associated proteins
XX
SQ   Sequence 766 AA;

  Query Match             97.8%;  Score 3933;  DB 5;  Length 766;
  Best Local Similarity   99.9%;  Pred. No. 0;
  Matches  727;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              |||||||||||||||||||||||||||||||||| ||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLIDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766


RESULT 24
AAO15555
ID   AAO15555 standard; protein; 766 AA.
XX
AC   AAO15555;
XX
DT   24-OCT-2002  (first entry)
XX
DE   Human dipeptidyl peptidase IV (DPP IV).
XX
KW   Human; angiodemic condition; angiotensin converting enzyme; ACE;
KW   vasopeptidase inhibitor; dipeptidyl peptidase IV; aminopeptidase P;
KW   DPP IV; aminopeptidase P; APP; hypertension; diabetes; cardiac disease;
KW   renal disease; enzyme.
XX
OS   Homo sapiens.
XX
PN   WO200259343-A2.
XX
```

```
Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766


RESULT 22
ADO40240
ID   ADO40240 standard; protein; 736 AA.
XX
AC   ADO40240;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Human DPP-IV extracellular domain protein SEQ ID NO:2.
XX
KW   crystal; mammalian dipeptidyl-peptidase IV extracellular domain;
KW   dipeptidyl-peptidase IV extracellular domain;
KW   DPP-IV extracellular domain; three-dimensional structure; antidiabetic;
KW   anorectic; cytostatic; type I diabetes; type II diabetes; IGT; obesity;
KW   cancer; human; DPP-IV; enzyme; protein co-ordinate data; EC 3.4.14.5.
XX
OS   Homo sapiens.
XX
PN   EP1422293-A1.
XX
PD   26-MAY-2004.
XX
PF   17-NOV-2003; 2003EP-00026169.
XX
PR   25-NOV-2002; 2002EP-00026367.
XX
PA   (HOFF ) HOFFMANN LA ROCHE & CO AG F.
XX
PI   Hennig M,  Loeffler BM,  Thoma R;
XX
DR   WPI; 2004-413363/39.
DR   N-PSDB; ADO40239.
XX
PT   New crystal of an extracellular domain of mammalian dipeptidyl-peptidase
PT   IV (DPP-IV) useful for identifying or designing inhibitors of DPP-IV
PT   activity.
XX
PS   Claim 31; SEQ ID NO 2; 215pp; English.
XX
CC   The present invention describes a crystal (I) of the extracellular domain
CC   of mammalian dipeptidyl-peptidase (DPP)-IV (EC 3.4.14.5). Also described:
CC   (1) a co-crystal of the extracellular domain of mammalian DPP-IV and a
CC   ligand bound to its active site; (2) a co-crystal of the extracellular
CC   domain of mammalian DPP-IV and a ligand bound to an allosteric binding
CC   site; (3) a co-crystal of the extracellular domain of mammalian DPP-IV
CC   and HgCl2; (4) crystallising (M1) mammalian DPP-IV; (5) co-crystallising
CC   (M2) mammalian DPP-IV and an active site ligand; (6) a crystal produced
CC   by (M1) and (M2); (7) determining the three-dimensional structure of a
CC   crystallised extracellular domain of mammalian DPP-IV to a resolution of
CC   3.5-2.1 angstrom or better; (8) a machine-readable data storage medium
CC   comprising a data storage material encoded with machine readable data
CC   which, when using a machine programmed with instructions for using the
CC   data, displays a graphical three-dimensional representation of a molecule
CC   or molecular complex comprising at least a portion of the extracellular
CC   domain of mammalian DPP-IV comprising a fully defined sequence (SEQ ID
CC   NO:2, S1) of 736 amino acids, where the extracellular domain comprising
CC   the ligand binding active site being defined by a set of points having a
CC   root mean square deviation of less than about 1.5 angstrom from points
CC   representing the backbone atoms of the amino acids as represented by
CC   structure coordinates as given in the specification; (9) a compound (II)
CC   identified by using (I); (10) a pharmaceutical composition (III)
CC   comprising (I) and a carrier; (11) an isolated nucleic acid sequence (IV)
CC   encoding the soluble extracellular domain of DPP-IV comprising a fully
CC   defined sequence (SEQ ID NO:1, S2) of 2211 nucleotides; (12) a nucleic
CC   acid construct (V) comprising an expression vector and (IV); (13) a host
CC   cell (VI) transformed with (V); (14) producing the soluble extracellular
CC   domain of DPP-IV, involves culturing (VI) under conditions permitting the
CC   expression of the soluble extracellular domain of DPP-IV by (VI); and
CC   (15) a polypeptide comprising the soluble extracellular domain of (S1).
CC   DPP-IV has antidiabetic, anorectic and cytostatic activities. (I) is
CC   useful for identifying a compound that interacts with DPP-IV. The
CC   compound interacts with the active site of DPP-IV. The compound interacts
CC   with an allosteric binding site of DPP-IV. The compound is an inhibitor
CC   of DPP-IV activity.(I) is useful for the identification and/or design of
CC   inhibitors of DPP-IV activity. (II) is useful as a therapeutic active
CC   substance, in particular for the treatment of diabetes type I, diabetes
CC   type II, IGT, obesity and cancer. (II) is useful for the manufacture of a
CC   medicament for the treatment of above mentioned disease. The present
CC   sequence represents the extracellular domain of human DPP-IV, which is
CC   used in the exemplification of the present invention.
XX
SQ   Sequence 736 AA;

  Query Match             97.8%;  Score 3933;  DB 8;  Length 736;
  Best Local Similarity   99.9%;  Pred. No. 0;
  Matches  727;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          9 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 68

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         69 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 128

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        129 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 188

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        189 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 248

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        249 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 308

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        309 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 368

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              ||||||||||||||||||||||||||||||||||| ||||||||||||||||||||||||
Db        369 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLIDYTKVTCLSCELNPERCQYYS 428

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        429 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 488

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        489 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 548

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        549 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 608

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        609 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 668

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

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Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766
```

RESULT 21
AEB94223
ID AEB94223 standard; protein; 766 AA.
XX
AC AEB94223;
XX
DT 06-OCT-2005 (first entry)
XX
DE CD26/dipeptidyl peptidase IV (DPPIV) SEQ ID NO:66.
XX
KW immune inhibition; fibroblast activation protein alpha dimer;
KW FAP alpha dimer; guillain barre syndrome; antiinflammatory; cns-gen.;
KW immune disorder; neurological disease; autoimmune disease;
KW immunosuppressive; graft versus host disease; transplant rejection;
KW endotoxic shock; osteoarthritis; antiarthritic; osteopathic;
KW musculoskeletal disease; allergy; antiallergic; asthma; antiasthmatic;
KW inflammation; respiratory disease; atherosclerosis; antiarteriosclerotic;
KW cardiovascular disease; metabolic disorder; hashimotos disease;
KW antithyroid; endocrine disease; inflammatory bowel disease;
KW antiinflammatory; gastrointestinal-gen.; gastrointestinal disease;
KW rheumatoid arthritis; antirheumatic; multiple sclerosis; neuroprotective;
KW autoimmune hepatitis; antiinflammatory; hepatotropic;
KW systemic lupus erythematosus; dermatological; dermatological disease;
KW uveitis; ophthalmological; autoimmune hemolytic anemia; antianemic;
KW hematological disease; rheumatic fever; antipyretic; Crohns disease;
KW psoriasis; antipsoriatic; graves disease; antithyroid;
KW respiratory syncytial virus infection; respiratory-gen.; virucide;
KW CD26 dipeptidyl peptidase IV; DPPIV.
XX
OS Homo sapiens.
XX
PN WO2005071073-A1.
XX
PD 04-AUG-2005.
XX
PF 10-JAN-2005; 2005WO-US000709.
XX
PR 09-JAN-2004; 2004US-0535577P.
XX
PA (POIN-) POINT THERAPEUTICS INC.
XX
PI Mclean PA, Jones B, Miller GT, Jesson MI;
XX
DR WPI; 2005-564220/57.
XX
PT Down-regulating an immune response comprises administering to a subject
PT in need a fibroblast activation protein (FAP) alpha dimer enzyme in an
PT amount effective to down-regulate an immune response.
XX
PS Disclosure; SEQ ID NO 66; 177pp; English.
XX
CC The invention relates to a method of down-regulating an immune response,
CC which comprises administering to a subject a fibroblast activation
CC protein (FAP) alpha dimer enzyme in an amount effective to down-regulate
CC an immune response. Also included are the following: a composition
CC comprising a FAP alpha dimer enzyme in a pharmaceutically acceptable
CC carrier, where the composition is sterile and lacks an adjuvant; a
CC composition comprising a FAP alpha dimer enzyme in a pharmaceutically
CC acceptable carrier, and a non-adjuvant second agent; a composition
CC comprising a FAP alpha dimer enzyme comprising an amino acid substitution
CC of A657D; and a composition comprising a FAP alpha dimer enzyme lacking
CC amino acids 269-448 and comprising amino acids 269-448 from mouse FAP.
CC The method further comprises administering to the subject a second agent.
CC The second agent is an anti-inflammatory agent, immunosuppressant, or
CC anti-infective agent such as antibacterial, antiviral, antifungal, anti-
CC parasitic or anti-mycobacterial agent. The FAP alpha dimer enzyme is wild
CC type FAP alpha dimer enzyme. The FAP alpha dimer enzyme is a truncation
CC mutant. The FAP alpha dimer enzyme is a fusion or chimeric protein. The
CC FAP alpha dimer enzyme is a heterodimer of a FAP alpha monomer and a
CC DPPIV/CD26 monomer. The FAP alpha dimer enzyme comprises an amino acid
CC substitution relative to wild type FAP alpha dimer. The amino acid
CC substitution is present in the beta-propeller domain, the catalytic
CC domain, or an N-linked glycosylation site and alters disulfide bond
CC formation. The immune response is an especially an IL-I mediated
CC condition, abnormal immune response selected from inflammation,
CC autoimmune disease, sepsis, graft versus host disease, transplant
CC rejection, toxic shock syndrome, allergy, asthma, atherosclerosis,
CC osteoarthritis, and Guillain-Barre's syndrome. The abnormal immune
CC response is subsequent to an infection, such as an RSV infection. The
CC autoimmune disease is selected from c, autoimmune thyroiditis, systemic
CC lupus erythematosus (SLE), uveitis, hemolytic anemias, rheumatic fever,
CC Crohn's disease, Guillain-Barre's syndrome, psoriasis, Graves' disease,
CC myasthenia gravis, glomerulonephritis, autoimmune hepatitis and multiple
CC sclerosis. The subject does not have cancer or a predisposition to
CC cancer. The present sequence represents the amino acid sequence of human
CC CD26/dipeptidyl peptidase IV (DPPIV).
XX
SQ Sequence 766 AA;

```
  Query Match             98.0%;  Score 3939;  DB 9;  Length 766;
  Best Local Similarity   100.0%;  Pred. No. 0;
  Matches  728;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638
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                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
                 ||||||||
Db        759 IKQCFSLP 766
```

```
RESULT 20
ADZ14038
ID   ADZ14038 standard; protein; 766 AA.
XX
AC   ADZ14038;
XX
DT   16-JUN-2005  (first entry)
XX
DE   Human dipeptidyl peptidase IV protein.
XX
KW   diabetes; antidiabetic; endocrine disease; gastrointestinal disease;
KW   metabolic disorder; dipeptidyl peptidase IV; CD26; enzyme.
XX
OS   Homo sapiens.
XX
PN   US2005074805-A1.
XX
PD   07-APR-2005.
XX
PF   28-SEP-2004; 2004US-00952459.
XX
PR   03-OCT-2003; 2003US-0508699P.
XX
PA   (HOFF ) HOFFMANN LA ROCHE INC.
XX
PI   Kochan JP,  Martin ML,  Rosinski JA;
XX
DR   WPI; 2005-283780/29.
DR   N-PSDB; ADZ14037.
DR   REFSEQ; NP_001926.
XX
PT   Diagnosing pre-diabetes, diabetes or susceptibility to diabetes, by
PT   obtaining biological sample, and detecting or measuring level of
PT   polypeptide marker comprising polypeptide e.g. vascular endothelial
PT   growth factor B, apolipoprotein D.
XX
PS   Claim 1; SEQ ID NO 18; 66pp; English.
XX
CC   The present invention relates to a method for diagnosing of pre-diabetes,
CC   diabetes or susceptibility to diabetes. The method involves obtaining a
CC   biological sample and detecting or measuring the level of a polypeptide
CC   marker, such as vascular endothelial growth factor B or apolipoprotein D.
CC   The invention is useful for treating diabetes and pre-diabetes. The
CC   present sequence is the human dipeptidyl peptidase IV (DPPIV, DPP4)
CC   protein. Dipeptidyl peptidase IV is also known as CD26, ADCP2, TP103,
CC   ADABP: adenosine deaminase complexing protein 2 and Tcell activation
CC   antigen CD26.
XX
SQ   Sequence 766 AA;

  Query Match             98.0%;  Score 3939;  DB 9;  Length 766;
  Best Local Similarity   100.0%;  Pred. No. 0;
  Matches  728;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638
```

```
KW   Antiinflammatory; Immune disorder; Dermatological; Immunosuppressive;
KW   Antirheumatic; Antiarthritic; Osteopathic; Hemostatic; Antianemic;
KW   Antithyroid; Antidiabetic; Nephrotropic; CNS-Gen.; Hepatotropic;
KW   Virucide; Gastrointestinal-Gen.; Antipsoriatic; Antiasthmatic;
KW   Antiallergic; ds; gene; diagnosis.
XX
OS   Homo sapiens.
XX
PN   WO2005016962-A2.
XX
PD   24-FEB-2005.
XX
PF   11-AUG-2004; 2004WO-US026249.
XX
PR   11-AUG-2003; 2003US-0493546P.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Abbas A,  Clark H,  Ouyang W,  Williams MP,  Wood WI,  Wu TD;
XX
DR   WPI; 2005-182330/19.
XX
PT   New nucleic acid encoding PRO polypeptide, useful for diagnosing and
PT   treating an immune related disorder, e.g. systemic lupus erythematosus,
PT   rheumatoid arthritis, osteoarthritis, thyroiditis, or diabetes mellitus.
XX
PS   Claim 8; SEQ ID NO 967; 158pp; English.
XX
CC   The invention relates to an isolated nucleic acid encoding a PRO
CC   polypeptide. The polypeptide, agonist or an antagonist, antibody,
CC   composition, and method are useful for diagnosing and treating an immune
CC   related disorder, e.g. systemic lupus erythematosus, rheumatoid
CC   arthritis. The present sequence represents a DNA encoding a PRO
CC   polypeptide.
XX
SQ   Sequence 766 AA;

  Query Match             98.0%;  Score 3939;  DB 9;  Length 766;
  Best Local Similarity   100.0%;  Pred. No. 0;
  Matches  728;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766


RESULT 19
ADY16580
ID   ADY16580 standard; protein; 766 AA.
XX
AC   ADY16580;
XX
DT   05-MAY-2005  (first entry)
XX
DE   PRO polypeptide SEQ ID NO 2386.
XX
KW   Antiinflammatory; Immune disorder; Dermatological; Immunosuppressive;
KW   Antirheumatic; Antiarthritic; Osteopathic; Hemostatic; Antianemic;
KW   Antithyroid; Antidiabetic; Nephrotropic; CNS-Gen.; Hepatotropic;
KW   Virucide; Gastrointestinal-Gen.; Antipsoriatic; Antiasthmatic;
KW   Antiallergic; ds; gene; diagnosis.
XX
OS   Homo sapiens.
XX
PN   WO2005016962-A2.
XX
PD   24-FEB-2005.
XX
PF   11-AUG-2004; 2004WO-US026249.
XX
PR   11-AUG-2003; 2003US-0493546P.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Abbas A,  Clark H,  Ouyang W,  Williams MP,  Wood WI,  Wu TD;
XX
DR   WPI; 2005-182330/19.
XX
PT   New nucleic acid encoding PRO polypeptide, useful for diagnosing and
PT   treating an immune related disorder, e.g. systemic lupus erythematosus,
PT   rheumatoid arthritis, osteoarthritis, thyroiditis, or diabetes mellitus.
XX
PS   Claim 8; SEQ ID NO 2386; 158pp; English.
XX
CC   The invention relates to an isolated nucleic acid encoding a PRO
CC   polypeptide. The polypeptide, agonist or an antagonist, antibody,
CC   composition, and method are useful for diagnosing and treating an immune
CC   related disorder, e.g. systemic lupus erythematosus, rheumatoid
CC   arthritis. The present sequence represents a DNA encoding a PRO
CC   polypeptide.
XX
SQ   Sequence 766 AA;

  Query Match             98.0%;  Score 3939;  DB 9;  Length 766;
  Best Local Similarity   100.0%;  Pred. No. 0;
  Matches  728;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
```

```
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766
```

RESULT 17
ADV25525
ID ADV25525 standard; protein; 766 AA.
XX
AC ADV25525;
XX
DT 24-FEB-2005 (first entry)
XX
DE Human dipeptidyl-peptidase IV.
XX
KW Dipeptidyl-peptidase IV; DPP4; cardiovascular disease;
KW dermatological disease; cancer; neoplasm; hematological disease;
KW respiratory disease; gastrointestinal disease; liver disease;
KW metabolic disorder; Cardiovascular-Gen.; Endocrine-Gen.;
KW Antiinflammatory; Gastrointestinal-Gen.; Gynecological; Hepatotropic;
KW Neuroprotective; Cytostatic; Antiparkinsonian; Nootropic; Cardiant;
KW Antiarrhythmic; Antiarteriosclerotic; Antianemic; Antidiabetic;
KW Dermatological; Immunosuppressive; Muscular-Gen.; Antirheumatic;
KW Antiarthritic; Antipsoriatic; Antiinfertility; Gene Therapy.
XX
OS Homo sapiens.
XX
PN WO2004104216-A2.
XX
PD 02-DEC-2004.
XX
PF 12-MAY-2004; 2004WO-EP005071.
XX
PR 21-MAY-2003; 2003EP-00011481.
XX
PA (FARB) BAYER HEALTHCARE AG.
XX
PI Golz S, Brueggemeier U, Summer H;
XX
DR WPI; 2004-834301/82.
DR N-PSDB; ADV25524.
XX
PT Use of dipeptidylpeptidase IV (DPP4) polypeptides or polynucleotides for
PT screening therapeutic agents or for diagnosing or treating diseases
PT associated with DPP4, e.g. cardiovascular, metabolic, inflammatory, or
PT neurological disorders.
XX
PS Disclosure; SEQ ID NO 2; 128pp; English.
XX
CC The present sequence is the protein sequence of human dipeptidyl-
CC peptidase IV (DPP4). The invention relates to novel disease associations
CC of DPP4 polypeptides and polynucleotides and to novel methods of
CC screening for therapeutic agents for the treatment of cardiovascular
CC disorders, dermatological disorders, cancer, hematological disorders,
CC respiratory diseases, gastrointestinal and liver diseases, urological
CC disorders and metabolic diseases. Pharmaceutical compositions are
CC provided for treatment of these diseases and disorders and comprise a
CC DPP4 polypeptide, a DPP4 polynucleotide, or regulators of DPP4 or
CC modulators of DPP4 activity. The therapeutic agent is preferably a small
CC molecule, an RNA molecule, an antisense oligonucleotide, a polypeptide,
CC an antibody or a ribozyme. The invention also provides methods of
CC diagnosing diseases and disorders associated with DPP4 by measuring the
CC amount of a DPP4 polynucleotide in a sample and comparing it with the
CC amount in a sample from a healthy and/or diseased mammal. The diseases
CC and disorders include Parkinson's disease, dementia, Alzheimer's disease,
CC myocardial infarction, arrhythmias, atherosclerosis, anemia, eosinophilic
CC disorders, leukemia, pancreatitis, Crohn's disease, inflammatory bowel
CC disease, diabetes, Cushing's syndrome, systemic lupus erythematosus,
CC myasthenia gravis, rheumatoid arthritis, psoriasis, scleroderma, or
CC infertility.
XX
SQ Sequence 766 AA;

Query Match 98.0%; Score 3939; DB 8; Length 766;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 728; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766
```

RESULT 18
ADY15161
ID ADY15161 standard; protein; 766 AA.
XX
AC ADY15161;
XX
DT 05-MAY-2005 (first entry)
XX
DE PRO polypeptide SEQ ID NO 967.
XX

```
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766
```

```
RESULT 16
ADU06688
ID   ADU06688 standard; protein; 766 AA.
XX
AC   ADU06688;
XX
DT   27-JAN-2005  (first entry)
XX
DE   Novel bronchial cancer-associated human protein SeqID914.
XX
KW   bronchial cancer; cytostatic; tumour-associated protein;
KW   cancer detection; metastasis; tumour; human.
XX
OS   Homo sapiens.
XX
PN   DE10316701-A1.
XX
PD   04-NOV-2004.
XX
PF   09-APR-2003; 2003DE-01016701.
XX
PR   09-APR-2003; 2003DE-01016701.
XX
PA   (HINZ/) HINZMANN B.
PA   (HERM/) HERMANN K.
PA   (CAST/) HEIDEN CASTANOS-VELEZ E.
XX
PI   Mennerich D, Bruemmendorf T, Heiden E, Hermann K, Kinnemann H;
PI   Li X, Roepcke S, Staub E, Hinzmann B, Rosenthal A, Pilarsky C;
XX
DR   WPI; 2004-786403/78.
DR   N-PSDB; ADU06201.
XX
PT   New nucleic acid, and derived proteins, useful for diagnosis of bronchial
PT   cancer and in screening for therapeutic and diagnostic agents.
XX
PS   Claim 2; SEQ ID NO 914; 1381pp; German.
XX
CC   This invention relates to a novel isolated nucleic acid associated with
CC   bronchial cancer comprising 489 defined sequences given in the
CC   specification. The invention may be useful for the production of
CC   compounds with a cytostatic activity through the inhibition of expression
CC   or activity of tumour-associated proteins. The novel DNA sequences and
CC   the proteins/peptides encoded by them are used for detecting bronchial
CC   cancer or determining the risk of developing it and to screen for
CC   specific binding partners of the DNA or protein sequences, where the
CC   binding partners are potentially useful as agents for treating or
CC   diagnosing bronchial cancer. The DNA or protein sequences can also be
CC   used for prognosis, detection of metastases and for secondary treatment
CC   (of tumours that have been stabilised or are no longer detectable).
CC   Detecting abnormal expression of the DNA sequences provides early
CC   diagnosis of bronchial cancers. The present sequence is that of a protein
CC   encoded by a novel bronchial cancer-associated human gene sequence of the
CC   invention.
XX
SQ   Sequence 766 AA;

  Query Match             98.0%;  Score 3939;  DB 8;  Length 766;
  Best Local Similarity   100.0%;  Pred. No. 0;
  Matches  728;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

SQ Sequence 766 AA;

Query Match 98.0%; Score 3939; DB 8; Length 766;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 728; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy          73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy         133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy         193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy         253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy         313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy         373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy         433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy         493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy         553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy         613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy         673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy         733 IKQCFSLP 740
               ||||||||
Db         759 IKQCFSLP 766
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RESULT 15
ADP54458
ID ADP54458 standard; protein; 766 AA.
XX
AC ADP54458;
XX
DT 18-NOV-2004 (first entry)
XX
DE Human PRO protein sequence SEQ ID NO:434.
XX
KW human; PRO; immune related disease; inflammatory immune response;
KW immune response stimulation; antiallergic; antianaemic; antiarthritic;
KW antiasthmatic; antidiabetic; antiinflammatory; antipsoriatic;
KW antirheumatic; antithyroid; CNS; dermatological; gastrointestinal;
KW haemostatic; hepatotropic; immunostimulant; immunosuppressive; muscular;
KW nephrotropic; neuroprotective; osteopathic; respiratory; vasotropic;
KW virucide; gene therapy.
XX
OS Homo sapiens.
XX
PN WO2004039956-A2.
XX
PD 13-MAY-2004.
XX
PF 28-OCT-2003; 2003WO-US034381.
XX
PR 29-OCT-2002; 2002US-0422472P.
XX
PA (GETH) GENENTECH INC.
XX
PI Aggarwal S, Clark H, Gurney AL, Schoenfeld J, Williams PM;
PI Wood WI, Wu TD;
XX
DR WPI; 2004-376182/35.
DR N-PSDB; ADP54457.
XX
PT New PRO polynucleotides and polypeptides, useful in useful in diagnosing
PT and treating an immune related disease, e.g. systemic lupus
PT erythematosus, rheumatoid arthritis, diabetes mellitus or asthma and in
PT stimulating an immune response.
XX
PS Claim 1; SEQ ID NO 434; 3009pp; English.
XX
CC The present invention describes an isolated PRO nucleic acid (I). Also
CC described: (1) a vector comprising (I); (2) a host cell comprising the
CC vector of (1); (3) a process for producing a PRO polypeptides; (4) an
CC isolated PRO polypeptide; (5) a chimeric molecule comprising the
CC polypeptide of (4) fused to a heterologous amino acid sequence; (6) an
CC antibody which specifically binds to a polypeptide of (4); (7) a
CC composition of matter comprising a polypeptide of (4), an agonist or
CC antagonist of the polypeptide or an antibody that binds to the
CC polypeptide in combination with a carrier; (8) an article of manufacture
CC comprising a container, a label on the container and a composition of
CC matter of (7); (9) a method of treating an immune related disease in a
CC mammal; (10) a method for determining the presence of a PRO polypeptide
CC in a sample suspected of having the polypeptide; (11) a method of
CC diagnosing an immune related disease or an inflammatory immune response
CC in mammal; (12) a method of identifying a compound that inhibits or
CC mimics the activity of or expression of a gene encoding a PRO polypeptide
CC ; and (13) a method of stimulating the immune response in a mammal. The
CC PRO sequences have antiallergic, antianaemic, antiarthritic,
CC antiasthmatic, antidiabetic, antiinflammatory, antipsoriatic,
CC antirheumatic, antithyroid, CNS, dermatological, gastrointestinal,
CC haemostatic, hepatotropic, immunostimulant, immunosuppressive, muscular,
CC nephrotropic, neuroprotective, osteopathic, respiratory, vasotropic and
CC virucide activities, and can be used in gene therapy. The nucleic acid
CC (I) and the encoded polypeptides, compositions, kits and methods are
CC useful in diagnosing and treating an immune related disease and in
CC stimulating an immune response. The present sequence represents a human
CC PRO protein from the present invention.
XX
SQ Sequence 766 AA;

Query Match 98.0%; Score 3939; DB 8; Length 766;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 728; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy          73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy         133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
PT   Use of a CD26 composition, and a chemotherapeutic and/or a
PT   radiotherapeutic agent for e.g. inhibiting the cell growth, inducing cell
PT   cycle arrest, killing a cancer cell, treating cancer, or inducing tumor
PT   regression or tumor necrosis.
XX
PS   Claim 23; Page 175-176; 182pp; English.
XX
CC   The specification describes a CD26 composition which, in conjunction with
CC   chemotherapeutic or radiotherapeutic agents, is used for the treatment
CC   and prevention of cancers. Expression of CD26 enhances the sensitivity of
CC   the cancer cell to the chemotherapeutic or radiotherapeutic agent. CD26
CC   is a dipeptidyl peptidase IV (DPPIV). The chemotherapeutic agent is a
CC   topoisomerase II inhibitor. The CD26 composition of the invention is
CC   useful for inhibiting the growth of a cell, inducing cell cycle arrest in
CC   a cell, killing a cancer cell, potentiating the effect of a
CC   chemotherapeutic agent and/or a radiotherapeutic agent on a tumour cell,
CC   inducing or enhancing apoptosis of a cancer cell, treating cancer, or
CC   inducing tumour regression or tumour necrosis. The CD26 composition is
CC   further useful for increasing topoisomerase II expression in a cell, for
CC   activating an antigen-presenting cell, or for potentiating immune
CC   responses of an animal. The present sequence represents a CD26 protein,
CC   and is encoded by vectors which are used to produce compositions of the
CC   invention.
XX
SQ   Sequence 766 AA;

  Query Match             98.0%;  Score 3939;  DB 8;  Length 766;
  Best Local Similarity   100.0%;  Pred. No. 0;
  Matches  728;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766


RESULT 14
ABM80355
ID   ABM80355 standard; protein; 766 AA.
XX
AC   ABM80355;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Tumour-associated antigenic target (TAT) polypeptide PRO80881, SEQ:895.
XX
KW   Tumour-associated antigenic target; TAT; human; overexpression; cancer;
KW   tumour; diagnosis; cell proliferative disorder; breast cancer;
KW   colorectal cancer; lung cancer; ovarian cancer; liver cancer;
KW   central nervous system cancer; bladder cancer; pancreatic cancer;
KW   cervical cancer; melanoma; leukaemia; hybridisation probe;
KW   chromosome identification; chromosome mapping; gene mapping;
KW   gene therapy; cytostatic.
XX
OS   Homo sapiens.
XX
PN   WO2004030615-A2.
XX
PD   15-APR-2004.
XX
PF   29-SEP-2003; 2003WO-US028547.
XX
PR   02-OCT-2002; 2002US-0414971P.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Wu TD,  Zhang Z,  Zhou Y;
XX
DR   WPI; 2004-347921/32.
DR   N-PSDB; ACN37783.
XX
PT   New tumor-associated antigenic target polypeptides and nucleic acids,
PT   useful in preparing a medicament for treating or detecting a
PT   proliferative disorder, e.g. breast, lung, colorectal, ovarian or
PT   prostate cancer or tumor.
XX
PS   Claim 12; SEQ ID NO 895; 7273pp; English.
XX
CC   The invention relates to human tumour-associated antigenic target (TAT)
CC   polypeptides, and their related nucleic acids. The TAT polypeptides are
CC   overexpressed in cancer tissues compared to normal tissues, and may thus
CC   serve as effective targets for the diagnosis and treatment of cancer in
CC   mammals. The invention also relates to nucleic acid and polypeptide
CC   sequences at least 80% identical to the TAT nucleic acids and
CC   polypeptides; expression vectors and host cells comprising a TAT nucleic
CC   acid; an antibody specific for a TAT polypeptide; a peptide or organic
CC   molecule which binds to a TAT polypeptide; fusion proteins comprising a
CC   TAT polypeptide; and methods and compositions for the treatment or
CC   diagnosis of cancer in mammals. TAT polypeptides, nucleic acids,
CC   antibodies, antagonists, binding molecules and compositions are useful
CC   for diagnosing or treating a cell proliferative disorder associated with
CC   increased TAT expression, particularly cancers such as breast cancer,
CC   colorectal cancer, lung cancer, ovarian cancer, liver cancer, bladder
CC   cancer, pancreatic cancer, cervical cancer, cancers of the central
CC   nervous system, melanoma and leukaemia. TAT nucleic acids may further be
CC   used as hybridisation probes, in chromosome and gene mapping, in
CC   chromosome identification and in gene therapy. The present sequence
CC   represents a TAT polypeptide of the invention
XX
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RESULT 12
ADO71612
ID   ADO71612 standard; protein; 766 AA.
XX
AC   ADO71612;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Amino acid sequence of a human CD26 protein.
XX
KW   CD26; chemotherapeutic; radiotherapeutic; cancer; cell growth;
KW   dipeptidyl peptidase IV; DPPIV; topoisomerase II inhibitor;
KW   cell cycle arrest; tumour; tumour necrosis; immune response; human.
XX
OS   Homo sapiens.
XX
PN   WO2004045497-A2.
XX
PD   03-JUN-2004.
XX
PF   15-MAY-2003; 2003WO-US015499.
XX
PR   17-MAY-2002; 2002US-0381606P.
XX
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Dang NH,  Morimoto C;
XX
DR   WPI; 2004-420511/39.
DR   N-PSDB; ADO71611, ADO71613.
XX
PT   Use of a CD26 composition, and a chemotherapeutic and/or a
PT   radiotherapeutic agent for e.g. inhibiting the cell growth, inducing cell
PT   cycle arrest, killing a cancer cell, treating cancer, or inducing tumor
PT   regression or tumor necrosis.
XX
PS   Claim 23; Page 151-153; 182pp; English.
XX
CC   The specification describes a CD26 composition which, in conjunction with
CC   chemotherapeutic or radiotherapeutic agents, is used for the treatment
CC   and prevention of cancers. Expression of CD26 enhances the sensitivity of
CC   the cancer cell to the chemotherapeutic or radiotherapeutic agent. CD26
CC   is a dipeptidyl peptidase IV (DPPIV). The chemotherapeutic agent is a
CC   topoisomerase II inhibitor. The CD26 composition of the invention is
CC   useful for inhibiting the growth of a cell, inducing cell cycle arrest in
CC   a cell, killing a cancer cell, potentiating the effect of a
CC   chemotherapeutic agent and/or a radiotherapeutic agent on a tumour cell,
CC   inducing or enhancing apoptosis of a cancer cell, treating cancer, or
CC   inducing tumour regression or tumour necrosis. The CD26 composition is
CC   further useful for increasing topoisomerase II expression in a cell, for
CC   activating an antigen-presenting cell, or for potentiating immune
CC   responses of an animal. The present sequence represents a CD26 protein,
CC   and is encoded by vectors which are used to produce compositions of the
CC   invention.
XX
SQ   Sequence 766 AA;

  Query Match             98.0%;  Score 3939;  DB 8;  Length 766;
  Best Local Similarity   100.0%;  Pred. No. 0;
  Matches  728;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766


RESULT 13
ADO71644
ID   ADO71644 standard; protein; 766 AA.
XX
AC   ADO71644;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Amino acid sequence of a human CD26 protein.
XX
KW   CD26; chemotherapeutic; radiotherapeutic; cancer; cell growth;
KW   dipeptidyl peptidase IV; DPPIV; topoisomerase II inhibitor;
KW   cell cycle arrest; tumour; tumour necrosis; immune response; human.
XX
OS   Homo sapiens.
XX
PN   WO2004045497-A2.
XX
PD   03-JUN-2004.
XX
PF   15-MAY-2003; 2003WO-US015499.
XX
PR   17-MAY-2002; 2002US-0381606P.
XX
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Dang NH,  Morimoto C;
XX
DR   WPI; 2004-420511/39.
DR   N-PSDB; ADO71643.
XX
```

```
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766


RESULT 11
ADO19806
ID   ADO19806 standard; protein; 766 AA.
XX
AC   ADO19806;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Human PRO polypeptide #365.
XX
KW   Human; PRO; immune related disorder; systemic lupus erythematosus;
KW   rheumatoid arthritis; osteoarthritis; juvenile chronic arthritis;
KW   systemic sclerosis; Sjogren's syndrome; vasculitis; sarcoidosis;
KW   autoimmune haemolytic anaemia; autoimmune thrombocytopenia; thyroiditis;
KW   diabetes mellitus; renal disease; demyelinating disease;
KW   central nervous system; peripheral nervous system;
KW   demyelinating polyneuropathy; Guillain-Barre syndrome;
KW   chronic inflammatory demyelinating polyneuropathy.
XX
OS   Homo sapiens.
XX
PN   WO2004043361-A2.
XX
PD   27-MAY-2004.
XX
PF   06-NOV-2003; 2003WO-US035268.
XX
PR   08-NOV-2002; 2002US-0425235P.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Fong S,  Dennis K,  Clark H,  Chiu H,  Schoenfeld J,  Williams PM;
PI   Wood WI,  Wu TD;
XX
DR   WPI; 2004-420067/39.
DR   N-PSDB; ADO19805.
XX
PT   Novel PRO polypeptide e.g., PRO69614, PRO71106, or PRO86388 useful for
PT   treating an immune related disorder such as systemic lupus erythematosus,
PT   rheumatoid arthritis, osteoarthritis, juvenile chronic arthritis or
PT   spondyloarthropathy.
XX
PS   Claim 7; SEQ ID NO 730; 1731pp; English.
XX
CC   The invention relates to human PRO polypeptides and the polynucleotides
CC   encoding them. The polypeptides and polynucleotides are useful for
CC   treating and diagnosing immune related disorders in mammals. The immune
CC   related disorders include systemic lupus erythematosus, rheumatoid
CC   arthritis, osteoarthritis, juvenile chronic arthritis, systemic
CC   sclerosis, Sjogren's syndrome, vasculitis, sarcoidosis, autoimmune
CC   haemolytic anaemia, autoimmune thrombocytopenia, thyroiditis, diabetes
CC   mellitus, immune-mediated renal disease, demyelinating diseases of the
CC   central or peripheral nervous system, demyelinating polyneuropathy,
CC   Guillain-Barre syndrome and chronic inflammatory demyelinating
CC   polyneuropathy. This sequence represents a human PRO polypeptide of the
CC   invention.
XX
SQ   Sequence 766 AA;

  Query Match             98.0%;  Score 3939;  DB 8;  Length 766;
  Best Local Similarity   100.0%;  Pred. No. 0;
  Matches  728;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766
```

```
CC   sequence is used in the exemplification of the present invention.
XX
SQ   Sequence 766 AA;

  Query Match            98.0%;  Score 3939;  DB 8;  Length 766;
  Best Local Similarity  100.0%;  Pred. No. 0;
  Matches  728;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766


RESULT 10
ADO19398
ID   ADO19398 standard; protein; 766 AA.
XX
AC   ADO19398;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Human PRO polypeptide #164.
XX
KW   Human; PRO; immune related disorder; systemic lupus erythematosus;
KW   rheumatoid arthritis; osteoarthritis; juvenile chronic arthritis;
KW   systemic sclerosis; Sjogren's syndrome; vasculitis; sarcoidosis;
KW   autoimmune haemolytic anaemia; autoimmune thrombocytopenia; thyroiditis;
KW   diabetes mellitus; renal disease; demyelinating disease;
KW   central nervous system; peripheral nervous system;
KW   demyelinating polyneuropathy; Guillain-Barre syndrome;
KW   chronic inflammatory demyelinating polyneuropathy.
XX
OS   Homo sapiens.
XX
PN   WO2004043361-A2.
XX
PD   27-MAY-2004.
XX
PF   06-NOV-2003; 2003WO-US035268.
XX
PR   08-NOV-2002; 2002US-0425235P.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Fong S,  Dennis K,  Clark H,  Chiu H,  Schoenfeld J,  Williams PM;
PI   Wood WI,  Wu TD;
XX
DR   WPI; 2004-420067/39.
DR   N-PSDB; ADO19397.
XX
PT   Novel PRO polypeptide e.g., PRO69614, PRO71106, or PRO86388 useful for
PT   treating an immune related disorder such as systemic lupus erythematosus,
PT   rheumatoid arthritis, osteoarthritis, juvenile chronic arthritis or
PT   spondyloarthropathy.
XX
PS   Claim 7; SEQ ID NO 328; 1731pp; English.
XX
CC   The invention relates to human PRO polypeptides and the polynucleotides
CC   encoding them. The polypeptides and polynucleotides are useful for
CC   treating and diagnosing immune related disorders in mammals. The immune
CC   related disorders include systemic lupus erythematosus, rheumatoid
CC   arthritis, osteoarthritis, juvenile chronic arthritis, systemic
CC   sclerosis, Sjogren's syndrome, vasculitis, sarcoidosis, autoimmune
CC   haemolytic anaemia, autoimmune thrombocytopenia, thyroiditis, diabetes
CC   mellitus, immune-mediated renal disease, demyelinating diseases of the
CC   central or peripheral nervous system, demyelinating polyneuropathy,
CC   Guillain-Barre syndrome and chronic inflammatory demyelinating
CC   polyneuropathy. This sequence represents a human PRO polypeptide of the
CC   invention.
XX
SQ   Sequence 766 AA;

  Query Match            98.0%;  Score 3939;  DB 8;  Length 766;
  Best Local Similarity  100.0%;  Pred. No. 0;
  Matches  728;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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PT New crystal of dipeptidyl peptidase IV capable of analyzing its three-
PT dimensional structure, useful for designing, identifying, evaluating or
PT searching an effector of the dipeptidyl peptidase IV.
XX
PS Claim 3; SEQ ID NO 2; 332pp; English.
XX
CC The invention relates to a novel crystal of a dipeptidyl peptidase IV
CC (DPPIV) which is sufficient to ensure a resolution capable of analysing
CC its three-dimensional structure up to the side chain level by X-ray
CC crystallographic structural analysis. The crystal of the invention
CC demonstrates immunomodulatory, antidiabetic, antiinflammatory,
CC neuroprotective, antithyroid, antirheumatic, antiarthritic, anti-HIV and
CC cytostatic activities and may be useful for providing a three-dimensional
CC structural coordinate as the information for designing, identifying,
CC evaluating or searching for an effector of the dipeptidyl peptidase IV.
CC The effector may be useful as a modulatory agent of immune response and
CC as a therapeutic or prophylactic agent for diabetes, inflammation,
CC multiple sclerosis, Grave's disease, chronic rheumatoid arthritis, AIDS
CC or cancer. The current sequence is that of the human full-length colon
CC dipeptidyl peptidase IV (DPPIV) protein of the invention.
XX
SQ Sequence 766 AA;

Query Match 98.0%; Score 3939; DB 8; Length 766;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 728; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy          73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy         133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy         193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy         253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy         313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy         373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy         433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy         493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy         553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy         613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy         673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy         733 IKQCFSLP 740
               ||||||||
Db         759 IKQCFSLP 766
```

RESULT 9
ADJ75313
ID ADJ75313 standard; protein; 766 AA.
XX
AC ADJ75313;
XX
DT 20-MAY-2004 (first entry)
XX
DE Marker gene related amino acid sequence SEQ ID NO:565.
XX
KW bronchial asthma; chronic obstructive pulmonary disease;
KW respiratory epithelial cell; interleukin-13; respiratory; antiasthmatic;
KW gene therapy; marker.
XX
OS Homo sapiens.
XX
PN EP1394274-A2.
XX
PD 03-MAR-2004.
XX
PF 04-AUG-2003; 2003EP-00254857.
XX
PR 06-AUG-2002; 2002JP-00229312.
PR 20-MAR-2003; 2003JP-00077212.
XX
PA (GENO-) GENOX RES INC.
XX
PI Ohtani N, Sugita Y, Yamaya M, Kubo H, Nagai H, Izuhara K;
XX
DR WPI; 2004-193155/19.
XX
PT Testing for bronchial asthma or chronic obstructive pulmonary disease by
PT comparing the expression level of a marker gene in a biological sample
PT from a subject with the expression level of the gene in a sample from a
PT healthy subject.
XX
PS Example 11; SEQ ID NO 565; 241pp; English.
XX
CC The present invention describes a method of testing for bronchial asthma
CC or chronic obstructive pulmonary disease. The method comprises
CC determining the expression level of a marker gene in a biological sample
CC from a subject, comparing the expression level determined with the
CC expression level of the marker gene in a biological sample from a healthy
CC subject, and judging whether the subject has bronchial asthma or chronic
CC obstructive pulmonary disease. The marker gene comprises: (a) a group of
CC genes (S1) whose expression levels increase when respiratory epithelial
CC cells are stimulated with interleukin-13; or (b) a group of genes (S2)
CC whose expression levels decrease when respiratory epithelial cells are
CC stimulated with interleukin-13. Also described: (1) a reagent (I) for
CC testing for bronchial asthma or chronic obstructive pulmonary disease;
CC (2) a kit for screening for a candidate compound for a therapeutic agent
CC to treat bronchial asthma or chronic obstructive pulmonary disease; (3)
CC an animal model for bronchial asthma or chronic obstructive pulmonary
CC disease; (4) an inducer that induces bronchial asthma in a mouse; (5) a
CC method for producing an animal model for bronchial asthma or chronic
CC obstructive pulmonary disease; (6) a therapeutic agent for bronchial
CC asthma or chronic obstructive pulmonary disease, comprising the compound,
CC a marker gene or an antisense nucleic acid corresponding to a portion of
CC the marker gene, a ribozyme, a polynucleotide that suppresses the
CC expression of the gene through an RNAi effect or an antibody recognising
CC a protein encoded by a marker gene; and (7) a DNA chip for testing for
CC bronchial asthma or a chronic obstructive pulmonary disease, on which a
CC probe has been immobilised to assay a marker gene. (I) has respiratory
CC and antiasthmatic activities, and can be used in gene therapy. The method
CC is useful for testing for or screening for a therapeutic agent for
CC bronchial asthma or chronic obstructive pulmonary disease. The present

PF 13-NOV-2002; 2002WO-US036810.
XX
PR 13-NOV-2001; 2001US-0350666P.
PR 21-NOV-2001; 2001US-0332464P.
PR 29-NOV-2001; 2001US-0334393P.
PR 03-DEC-2001; 2001US-0335394P.
PR 14-DEC-2001; 2001US-0340376P.
PR 08-JAN-2002; 2002US-0347211P.
PR 10-JAN-2002; 2002US-0347349P.
PR 08-FEB-2002; 2002US-0355250P.
PR 13-FEB-2002; 2002US-0356714P.
PR 20-FEB-2002; 2002US-0359077P.
PR 29-MAR-2002; 2002US-0368809P.
PR 04-APR-2002; 2002US-0370110P.
PR 12-APR-2002; 2002US-0372246P.
PR 05-JUN-2002; 2002US-0386614P.
PR 16-JUL-2002; 2002US-0396839P.
PR 22-JUL-2002; 2002US-0397775P.
PR 22-JUL-2002; 2002US-0397845P.
PR 09-SEP-2002; 2002US-0409450P.
XX
PA (EOSB-) EOS BIOTECHNOLOGY INC.
XX
PI Afar D, Aziz N, Ginsburg WM, Gish KC, Glynne R, Hevezi PA;
PI Mack DH, Murray R, Watson SR, Wilson KE, Zlotnik A;
XX
DR WPI; 2003-468649/44.
DR N-PSDB; ADN39271.
XX
PT Determining the presence or absence of a pathological cell in a patient,
PT useful for diagnosing, prognosing or treating cancer, comprises detecting
PT a nucleic acid in a biological sample.
XX
PS Claim 12; SEQ ID NO 590; 1385pp; English.
XX
CC The invention relates to nucleic acids and proteins (ADN38683-ADN40064)
CC whose expression is upregulated or downregulated in specific cancers or
CC other diseases such as angiogenic or fibrotic disorders, and to methods
CC of determining the presence or absence of a pathological cell in a
CC patient by detecting a nucleic acid at least 80% identical to those of
CC the invention or by detecting a polypeptide of the invention. The
CC invention also relates to expression vectors and host cells comprising a
CC nucleic acid of the invention; antibodies which specifically bind a
CC polypeptide of the invention; use of such antibodies for drug targeting;
CC and methods of screening for modulators of activity or expression of the
CC polypeptides and nucleic acids. The nucleic acids, polypeptides,
CC antibodies and methods are useful for diagnosing, prognosing and treating
CC cancer and other conditions such as psoriasis, ischaemia, heart disease,
CC atherosclerosis, inflammatory diseases, autoimmune diseases, retinal
CC neovascularistaion syndromes, scarring and uterine fibroids. They may
CC also be useful in wound healing and in contraception. The present
CC sequence represents a polypeptide of the invention.
XX
SQ Sequence 766 AA;

Query Match 98.0%; Score 3939; DB 7; Length 766;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 728; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy          73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy         133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy         193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy         253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy         313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy         373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy         433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy         493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy         553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy         613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy         673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy         733 IKQCFSLP 740
               ||||||||
Db         759 IKQCFSLP 766
```

RESULT 8
ADJ83981
ID ADJ83981 standard; protein; 766 AA.
XX
AC ADJ83981;
XX
DT 06-MAY-2004 (first entry)
XX
DE Human full-length colon dipeptidyl peptidase IV (DPPIV) protein.
XX
KW crystal; proteni co-ordinate data; dipeptidyl peptidase IV; DPPIV;
KW immunomodulatory; antidiabetic; antiinflammatory; neuroprotective;
KW antithyroid; antirheumatic; antiarthritic; anti-HIV; cytostatic;
KW immune response; diabetes; inflammation; multiple sclerosis;
KW Grave's disease; chronic rheumatoid arthritis; AIDS; cancer; human;
KW colon; enzyme.
XX
OS Homo sapiens.
XX
PN WO2004011640-A1.
XX
PD 05-FEB-2004.
XX
PF 28-JUL-2003; 2003WO-JP009523.
XX
PR 29-JUL-2002; 2002US-0398761P.
XX
PA (TANA) TANABE SEIYAKU CO.
XX
PI Hiramatsu H, Kyono K, Shima H, Sugiyama S;
XX
DR WPI; 2004-156830/15.
DR N-PSDB; ADJ83980.
XX

```
DT   02-DEC-2004  (revised)
DT   29-JAN-2004  (first entry)
XX
DE   Human Protein AAA52308, SEQ ID NO 12620.
XX
KW   Human; pain; neuronal tissue; gene therapy;
KW   spinal segmental nerve injury; chronic constriction injury; CCI;
KW   spared nerve injury; SNI; Chung.
XX
OS   Homo sapiens.
OS   Unidentified.
XX
PN   WO2003016475-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US025765.
XX
PR   14-AUG-2001; 2001US-0312147P.
PR   01-NOV-2001; 2001US-0346382P.
PR   26-NOV-2001; 2001US-0333347P.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
PA   (FARB ) BAYER AG.
XX
PI   Woolf C,  D'urso D,  Befort K,  Costigan M;
XX
DR   WPI; 2003-268312/26.
DR   GENBANK; AAA52308.
XX
PT   New composition comprising two or more isolated polypeptides, useful for
PT   preparing a medicament for treating pain in an animal.
XX
PS   Example 1; Page; 1017pp; English.
XX
CC   The invention discloses a composition comprising two or more isolated rat
CC   or human polynucleotides or a polynucleotide which represents a fragment,
CC   derivative or allelic variation of the nucleic acid sequence. Also
CC   claimed are a vector comprising the novel polynucleotide, a host cell
CC   comprising the vector, a method for identifying a nucleotide sequence
CC   which is differentially regulated in an animal subjected to pain and a
CC   kit to perform the method, an array, a method for identifying an agent
CC   that increases or decreases the expression of the polynucleotide sequence
CC   that is differentially expressed in neuronal tissue of a first animal
CC   subjected to pain, a method for identifying a compound which regulates
CC   the expression of a polynucleotide sequence which is differentially
CC   expressed in an animal subjected to pain, a method for identifying a
CC   compound that regulates the activity of one or more of the
CC   polynucleotides, a method for producing a pharmaceutical composition, a
CC   method for identifying a compound or small molecule that regulates the
CC   activity in an animal of one or more of the polypeptides given in the
CC   specification, a method for identifying a compound useful in treating
CC   pain and a pharmaceutical composition comprising the one or more
CC   polypeptides or their antibodies. The polynucleotide or the compound that
CC   modulates its activity is useful for preparing a medicament for treating
CC   pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC   injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
CC   therapy). The sequence presented is a human protein (described in Table 3
CC   of the specification) which is differentially expressed during pain.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic form directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 766 AA;

  Query Match             98.0%;  Score 3939;  DB 7;  Length 766;
  Best Local Similarity   100.0%;  Pred. No. 0;
  Matches  728;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766


RESULT 7
ADN39272
ID   ADN39272 standard; protein; 766 AA.
XX
AC   ADN39272;
XX
DT   17-JUN-2004  (first entry)
XX
DE   Cancer/angiogenesis/fibrosis-related polypeptide, SEQ ID NO:590.
XX
KW   Human; differential expression; cancer; angiogenic disorder;
KW   fibrotic disorder; psoriasis; ischaemia; heart disease; atherosclerosis;
KW   inflammatory disease; autoimmune disease;
KW   retinal neovascularistaion syndrome; scarring; uterine fibroid;
KW   detection; diagnosis; prognosis; drug screening; drug targeting;
KW   wound healing; contraception; cytostatic; cardiant; immunomodulatory;
KW   vulnerary; gene therapy; vaccine.
XX
OS   Homo sapiens.
XX
PN   WO2003042661-A2.
XX
PD   22-MAY-2003.
XX
```

```
Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766
```

RESULT 5
ADD27855
ID ADD27855 standard; protein; 766 AA.
XX
AC ADD27855;
XX
DT 15-JAN-2004 (first entry)
XX
DE Human dipeptidyl peptidase IV (DPPIV).
XX
KW Mucosal inflammation; rhinitis; sinusitis; exopeptidase; substance P; SP;
KW neurokinin 1 receptor; NK1 receptor; allergy; asthma; antiallergic;
KW antiinflammatory; antiasthmatic; human; dipeptidyl peptidase IV; DPPIV;
KW enzyme.
XX
OS Homo sapiens.
XX
PN US2003165489-A1.
XX
PD 04-SEP-2003.
XX
PF 27-NOV-2001; 2001US-00993959.
XX
PR 28-FEB-2001; 2001US-00794236.
XX
PA (BMRA-) BMRA CORP BV.
XX
PI Grouzmann E, Lacroix J, Monod M;
XX
DR WPI; 2003-811386/76.
XX
PT Treatment of patient for mucosal inflammation associated with rhinitis
PT and/or sinusitis involves intranasally administering peptidase that
PT cleaves at Xaa-Pro sequences or agent inhibiting binding of Sp to
PT neurokinin 1 receptor.
XX
PS Disclosure; SEQ ID NO 1; 14pp; English.
XX
CC The present invention relates to a method of treating a patient for
CC mucosal inflammation associated with rhinitis and/or sinusitis. The
CC method comprises intranasally administering to the patient a peptidase
CC that cleaves at Xaa-Pro sequences or an agent that inhibits the binding
CC of substance P (SP) to the neurokinin 1 (NK1) receptor. The peptidase is
CC an exopeptidase, preferably selected from human dipeptidyl peptidase IV
CC (DPPIV), human quiescent cell proline dipeptidase, human dipeptidyl
CC peptidase 8, or human attractin. The method is useful for treating a
CC patient for mucosal inflammation associated with rhinitis and/or
CC sinusitis which are the result of allergies or asthma. The invention
CC provides an effective treatment of the inflammation associated with both
CC rhinitis and sinusitis. The present sequence represents human DPPIV.
XX
SQ Sequence 766 AA;

```
  Query Match             98.0%;  Score 3939;  DB 7;  Length 766;
  Best Local Similarity   100.0%;  Pred. No. 0;
  Matches  728;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766
```

RESULT 6
ADD46934
ID ADD46934 standard; protein; 766 AA.
XX
AC ADD46934;
XX

```
  Matches  728;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766


RESULT 4
AAG78417
ID   AAG78417 standard; protein; 766 AA.
XX
AC   AAG78417;
XX
DT   12-APR-2002  (first entry)
XX
DE   Human dipeptidyl peptidase IV amino acid sequence.
XX
KW   21953 prolyl oligopeptidase; antibody; proline; endopeptidase; cancer;
KW   cardiovascular disease; autoimmune disease; atopic allergy;
KW   neuronal disorder; vascular disorder; prostate disorder; cytostatic;
KW   antidiabetic; antiarthritic; antiasthmatic; antiinflammatory;
KW   diabetes mellitus; arthritis; multiple sclerosis; asthma;
KW   Grave's disease; neuronal disorder; demyelinating disease;
KW   dipeptidyl peptidase.
XX
OS   Homo sapiens.
XX
PN   WO200179473-A2.
XX
PD   25-OCT-2001.
XX
PF   11-APR-2001; 2001WO-US040483.
XX
PR   18-APR-2000; 2000US-0197508P.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Meyers RA,  Williamson M;
XX
DR   WPI; 2002-034353/04.
XX
PT   New polypeptides 21953, member of human prolyl oligopeptidase family,
PT   useful as diagnostic targets and therapeutic agents for controlling
PT   cancer, lymphoma and leukemia.
XX
PS   Disclosure; Fig 3; 121pp; English.
XX
CC   This invention relates to an isolated 21953 human prolyl oligopeptidase.
CC   Which is cytostatic, antidiabetic, antiarthritic, neuroprotective,
CC   antithyroid, dermatological, antipsoriatic, antiasthmatic,
CC   ophthalmological, antiinflammatory, nootropic, antiparkinsonian,
CC   anticonvulsant, gynaecological, vasotropic, antianginal, cardiant,
CC   antiatherosclerotic, anorectic and metabolic in its action. Uses include
CC   gene therapy, expression or activity of 21953 protein modulator, it is
CC   useful for identifying a compound which binds to it and can be used in
CC   preventing, treating or detecting a cellular proliferative or
CC   differentiative disorder. The 21953 molecules can act as novel diagnostic
CC   targets and therapeutic agents for controlling disorders associated with
CC   the aberrant activity or degradation of peptide hormones e.g., disorders
CC   associated with cell differentiation and proliferation such as cancer,
CC   immune function, reproductive, neurological and cardiovascular function.
CC   The 21953 molecules are thus useful for treating and preventing cellular
CC   proliferative and differentiative disorders, haematopoietic neoplastic
CC   disorders, immune disorders such as autoimmune diseases, diabetes
CC   mellitus, arthritis, multiple sclerosis, asthma, Grave's disease,
CC   neuronal disorders, demyelinating diseases, vascular disorders and
CC   metabolism or pain disorders. This sequence represents the amino acid
CC   sequence of human dipeptidyl peptidase IV
XX
SQ   Sequence 766 AA;

  Query Match             98.0%;  Score 3939;  DB 5;  Length 766;
  Best Local Similarity   100.0%;  Pred. No. 0;
  Matches  728;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398
```

```
FT   Region          552. .766
FT                   /label= C-terminal region of extracellular domain
FT                   /note= "1 N-linked glycosylation site & 1 catalytic site"
FT   Active-site     627. .631
FT                   /label= active site of serine protease/esterase
FT                   /note= "fits the consensus sequence GXSXG"
XX
PN   WO9316102-A1.
XX
PD   19-AUG-1993.
XX
PF   09-APR-1992;   92WO-US002892.
XX
PR   06-FEB-1992;   92US-00832211.
XX
PA   (DAND ) DANA FARBER CANCER INST INC.
XX
PI   Morimoto C,  Schlossman SF,  Tanaka T;
XX
DR   WPI; 1993-272827/34.
DR   N-PSDB; AAQ46089.
XX
PT   Polypeptide fragments of CD26 - are capable of disrupting binding of CD45
PT   and CD26 and thus interfering with T-cell activation.
XX
PS   Disclosure; Page 39-43; 73pp; English.
XX
CC   C26 is a human T cell antivation antigen originally identified by its
CC   reactivity with the MAb Ta1. C26 cDNA library was constructed from human
CC   PHA-activated T cells using the CDM7vector.The hydrophobic N-terminal of
CC   the predicted CD26 polypeptide has the characteristics of a signal
CC   sequence of the type II membrane protein, which is reinforced by the
CC   observation that potential N-glycosylation sites are located in the
CC   carboxy side of the hydrophobic core.Therefore the N-terminal 6 AAs are
CC   predicted to be cytoplasmic, the next 22 AAs are predicted to transverse
CC   the cytoplasmic membrane, and the 738 C-terminal AAs constitute the
CC   predicted extracellular domain. (Updated on 25-MAR-2003 to correct PN
CC   field.)
XX
SQ   Sequence 766 AA;

  Query Match             98.0%;  Score 3939;  DB 2;  Length 766;
  Best Local Similarity   100.0%;  Pred. No. 0;
  Matches  728;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         39 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 98

Qy         73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 158

Qy        133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        159 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 218

Qy        193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        219 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 278

Qy        253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        279 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 338

Qy        313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        339 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 398

Qy        373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 458

Qy        433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        459 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 518

Qy        493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        519 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 578

Qy        553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        579 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 638

Qy        613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        639 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 698

Qy        673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        699 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 758

Qy        733 IKQCFSLP 740
              ||||||||
Db        759 IKQCFSLP 766


RESULT 3
ABB08991
ID   ABB08991 standard; protein; 766 AA.
XX
AC   ABB08991;
XX
DT   19-JUN-2002  (first entry)
XX
DE   Human dipeptidyl peptidase IV.
XX
KW   Human; dipeptidyl peptidase IV; antiasthmatic; antiallergic;
KW   antiinflammatory.
XX
OS   Homo sapiens.
XX
PN   US6337069-B1.
XX
PD   08-JAN-2002.
XX
PF   28-FEB-2001; 2001US-00794236.
XX
PR   28-FEB-2001; 2001US-00794236.
XX
PA   (BMRA-) BMRA CORP BV.
XX
PI   Grouzmann E,  Lacroix J,  Monod M;
XX
DR   WPI; 2002-163235/21.
XX
PT   Treating a patient for mucosal inflammation associated with rhinitis,
PT   sinusitis or both, by intranasally administering a peptidase that cleaves
PT   at Xaa-Pro sequences, to the patient.
XX
PS   Disclosure; Col 9-14; 13pp; English.
XX
CC   Thus invention relates to the treating of a patient for mucosal
CC   inflammation associated with rhinitis or sinusitis, comprising
CC   intranasally administering a peptidase. The peptidase is considered
CC   antiasthmatic, antiallergic and antiinflammatory in its action. The
CC   peptidase cleaves at Xaa-Pro sequences and is useful for treating a
CC   patient for mucosal inflammation associated with rhinitis or sinusitis,
CC   which is the result of allergies or asthma. This sequence represents
CC   human dipeptidyl peptidase IV
XX
SQ   Sequence 766 AA;

  Query Match             98.0%;  Score 3939;  DB 5;  Length 766;
  Best Local Similarity   100.0%;  Pred. No. 0;
```

98	1002	24.9	988	4	ABB65641	Abb65641 Drosophil
99	998	24.8	775	9	ADY51819	Ady51819 T. rubrum
100	987	24.6	771	2	AAW89589	Aaw89589 Aspergill

ALIGNMENTS

RESULT 1
AAR54612
ID AAR54612 standard; protein; 759 AA.
XX
AC AAR54612;
XX
DT 25-MAR-2003 (revised)
DT 09-DEC-1994 (first entry)
XX
DE Delta3-9 CD26.
XX
KW Human; T cell activation antigen; CD26; analogues; deletion; soluble;
KW signal peptidase; immune-stimulating; response-stimulating; AIDS;
KW immunosuppression; AIDS-related complex.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Misc-difference 2. .3
FT /note= "Position of delta3-9 deletion"
XX
PN WO9409132-A1.
XX
PD 28-APR-1994.
XX
PF 19-AUG-1993; 93WO-US007923.
XX
PR 21-AUG-1992; 92US-00934162.
XX
PA (DAND) DANA FARBER CANCER INST INC.
XX
PI Morimoto C, Schlossman S, Tanaka T;
XX
DR WPI; 1994-151317/18.
XX
PT Polypeptide fragments and analogues of CD26 and encoding nucleic acid -
PT useful for stimulating immune response, e.g. for treatment of AIDS to
PT counteract immunosuppressive drug, and as vaccine adjuvant.
XX
PS Claim 3; Page 49-52; 85pp; English.
XX
CC The sequences given in AAR54612-14 represents analogues of the human T
CC cell activation antigen CD26 which have internal deletions. The analogues
CC pref. lack residues 3-9 or 24-34. These analogues are soluble under
CC physiological conditions and lack enough amino acid residues to render
CC them susceptible to cleavage by signal peptidase. The peptide fragments
CC and analogues are useful as immune or response- stimulating therapeutics,
CC eg. they may be used for treatment of disease conditions characterised by
CC immunosuppression, eg. AIDS or AIDS-related complex, other virally or
CC environmentally-induced conditions, and certain congenital immune
CC deficiencies. The peptides can be employed to increase immune function
CC which has been impaired by use of immunosupressive drugs, such as certain
CC chemotherapeutic drugs. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 759 AA;

Query Match 98.0%; Score 3939; DB 2; Length 759;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 728; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          13 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 72
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          32 SRKTYTLTDYLKNTYRLKLYSLRWISDHEYLYKQENNILVFNAEYGNSSVFLENSTFDEF 91

Qy          73 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 132
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          92 GHSINDYSISPDGQFILLEYNYVKQWRHSYTASYDIYDLNKRQLITEERIPNNTQWVTWS 151

Qy         133 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 192
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         152 PVGHKLAYVWNNDIYVKIEPNLPSYRITWTGKEDIIYNGITDWVYEEEVFSAYSALWWSP 211

Qy         193 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 252
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         212 NGTFLAYAQFNDTEVPLIEYSFYSDESLQYPKTVRVPYPKAGAVNPTVKFFVVNTDSLSS 271

Qy         253 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 312
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         272 VTNATSIQITAPASMLIGDHYLCDVTWATQERISLQWLRRIQNYSVMDICDYDESSGRWN 331

Qy         313 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 372
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         332 CLVARQHIEMSTTGWVGRFRPSEPHFTLDGNSFYKIISNEEGYRHICYFQIDKKDCTFIT 391

Qy         373 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 432
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         392 KGTWEVIGIEALTSDYLYYISNEYKGMPGGRNLYKIQLSDYTKVTCLSCELNPERCQYYS 451

Qy         433 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 492
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         452 VSFSKEAKYYQLRCSGPGLPLYTLHSSVNDKGLRVLEDNSALDKMLQNVQMPSKKLDFII 511

Qy         493 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 552
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         512 LNETKFWYQMILPPHFDKSKKYPLLLDVYAGPCSQKADTVFRLNWATYLASTENIIVASF 571

Qy         553 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 612
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         572 DGRGSGYQGDKIMHAINRRLGTFEVEDQIEAARQFSKMGFVDNKRIAIWGWSYGGYVTSM 631

Qy         613 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 672
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         632 VLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTVMSRAENFKQV 691

Qy         673 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 732
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         692 EYLLIHGTADDNVHFQQSAQISKALVDVGVDFQAMWYTDEDHGIASSTAHQHIYTHMSHF 751

Qy         733 IKQCFSLP 740
               ||||||||
Db         752 IKQCFSLP 759
```

RESULT 2
AAR40909
ID AAR40909 standard; protein; 766 AA.
XX
AC AAR40909;
XX
DT 25-MAR-2003 (revised)
DT 05-FEB-1994 (first entry)
XX
DE Sequence encoded by human CD26 cDNA.
XX
KW Human T cell activation antigen; monoclonal antibody Ta1.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Region 7. .28
FT /label= hydrophobic
FT Region 29. .323
FT /label= N-terminal glycosylated region of extracellular
FT domain
FT /note= "8 sites for N-linked glycans"
FT Region 324. .551
FT /label= Cysteine rich region of extracellular domain
FT /note= "1 N-linked glycosylation site"

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OM protein - protein search, using sw model

Run on: February 17, 2006, 20:37:32 ; Search time 189 Seconds
(without alignments)
1720.319 Million cell updates/sec

Title: US-10-659-055-3
Perfect score: 4020
Sequence: 1 ADPGGSHHHHHHSRKTYTLT.....AHQHIYTHMSHFIKQCFSLP 740

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2443163 seqs, 439378781 residues

Total number of hits satisfying chosen parameters: 2443163

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database : A_Geneseq_21:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2004s:*
9: geneseqp2005s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	3939	98.0	759	2	AAR54612	Aar54612 Delta3-9
2	3939	98.0	766	2	AAR40909	Aar40909 Sequence
3	3939	98.0	766	5	ABB08991	Abb08991 Human dip
4	3939	98.0	766	5	AAG78417	Aag78417 Human dip
5	3939	98.0	766	7	ADD27855	Add27855 Human dip
6	3939	98.0	766	7	ADD46934	Add46934 Human Pro
7	3939	98.0	766	7	ADN39272	Adn39272 Cancer/an
8	3939	98.0	766	8	ADJ83981	Adj83981 Human ful
9	3939	98.0	766	8	ADJ75313	Adj75313 Marker ge
10	3939	98.0	766	8	ADO19398	Ado19398 Human PRO
11	3939	98.0	766	8	ADO19806	Ado19806 Human PRO
12	3939	98.0	766	8	ADO71612	Ado71612 Amino aci
13	3939	98.0	766	8	ADO71644	Ado71644 Amino aci
14	3939	98.0	766	8	ABM80355	Abm80355 Tumour-as
15	3939	98.0	766	8	ADP54458	Adp54458 Human PRO
16	3939	98.0	766	8	ADU06688	Adu06688 Novel bro
17	3939	98.0	766	8	ADV25525	Adv25525 Human dip
18	3939	98.0	766	9	ADY15161	Ady15161 PRO polyp
19	3939	98.0	766	9	ADY16580	Ady16580 PRO polyp
20	3939	98.0	766	9	ADZ14038	Adz14038 Human dip
21	3939	98.0	766	9	AEB94223	Aeb94223 CD26/dipe
22	3933	97.8	736	8	ADO40240	Ado40240 Human DPP
23	3933	97.8	766	5	ABG61910	Abg61910 Prostate
24	3933	97.8	766	5	AAO15555	Aao15555 Human dip
25	3933	97.8	766	6	ABP56700	Abp56700 Human liv
26	3933	97.8	766	7	ADD14045	Add14045 Human src
27	3933	97.8	766	7	ADN39604	Adn39604 Cancer/an
28	3933	97.8	766	8	ADO19400	Ado19400 Human PRO
29	3929	97.7	766	6	ABP55629	Abp55629 Human dpp
30	3929	97.7	766	8	ADQ80365	Adq80365 Dipeptidy
31	3929	97.7	766	9	AEB77579	Aeb77579 Human dip
32	3928	97.7	766	2	AAR54611	Aar54611 Native CD
33	3841	95.5	739	2	AAR54613	Aar54613 Delta24-3
34	3503	87.1	688	8	ADO71642	Ado71642 Amino aci
35	3409.5	84.8	767	3	AAB11748	Aab11748 Rat dipep
36	3406.5	84.7	767	9	AEB77580	Aeb77580 Rat dipep
37	3402.5	84.6	767	7	ADD46932	Add46932 Rat Prote
38	3395.5	84.5	767	6	ABP56699	Abp56699 Rat liver
39	3390	84.3	760	8	ADJ76138	Adj76138 Marker ge
40	3390	84.3	760	8	ADO71646	Ado71646 Amino aci
41	3390	84.3	760	9	AEB94226	Aeb94226 Mouse CD2
42	3374	83.9	760	9	AEB77581	Aeb77581 Mouse dip
43	3010	74.9	593	2	AAR40916	Aar40916 Sequence
44	3010	74.9	593	2	AAR54614	Aar54614 Delta594-
45	2175	54.1	734	9	AEB94218	Aeb94218 Human sol
46	2175	54.1	760	7	ADN95552	Adn95552 Human BEC
47	2175	54.1	760	8	ADQ21351	Adq21351 Human sof
48	2175	54.1	760	9	AEB94159	Aeb94159 Human wil
49	2168	53.9	760	2	AAW27438	Aaw27438 Human fib
50	2168	53.9	760	6	ABR47452	Abr47452 Breast ca
51	2168	53.9	760	9	ADW14775	Adw14775 Tumor-ass
52	2163	53.8	723	9	AEB94227	Aeb94227 Human sol
53	2160	53.7	750	9	AEB94161	Aeb94161 Human sol
54	2158.5	53.7	761	9	AEB94163	Aeb94163 Mouse wil
55	1960.5	48.8	759	2	AAW31963	Aaw31963 Human fib
56	1289.5	32.1	504	5	ADI17327	Adi17327 Polypepti
57	1229	30.6	789	5	ABP43687	Abp43687 Dipeptidy
58	1223	30.4	746	6	ABP55582	Abp55582 Human DPP
59	1223	30.4	746	6	ABP55584	Abp55584 Human DPP
60	1223	30.4	746	6	ABP55581	Abp55581 Human DPP
61	1223	30.4	789	6	ABP55583	Abp55583 Human DPP
62	1223	30.4	796	5	ABG61593	Abg61593 Human DPP
63	1223	30.4	796	5	ABB98124	Abb98124 Human PMM
64	1223	30.4	796	5	ABB04588	Abb04588 Human ami
65	1223	30.4	796	6	ABP55624	Abp55624 Human DPP
66	1223	30.4	796	6	ABP55580	Abp55580 Human DPP
67	1223	30.4	796	6	ABP55628	Abp55628 Human dpp
68	1223	30.4	796	7	ADA09104	Ada09104 Novel hum
69	1223	30.4	797	6	ABP55573	Abp55573 Human DPP
70	1217	30.3	798	7	ADE47758	Ade47758 Human NOV
71	1217	30.3	798	8	ADJ79028	Adj79028 Human NOV
72	1207	30.0	796	6	ABP55592	Abp55592 DPP10 pro
73	1207	30.0	796	6	ABP55591	Abp55591 DPP10 tra
74	1198	29.8	228	6	ABP55596	Abp55596 DPP10 hom
75	1198	29.8	743	5	ADR43716	Adr43716 Human pro
76	1196	29.8	706	5	ABG61611	Abg61611 Human DPR
77	1168.5	29.1	800	6	ABP55579	Abp55579 Mouse DPP
78	1166	29.0	789	6	ABP55577	Abp55577 Mouse DPP
79	1166	29.0	796	6	ABP55576	Abp55576 Mouse DPP
80	1166	29.0	796	6	ABP55574	Abp55574 Mouse DPP
81	1166	29.0	796	6	ABP55625	Abp55625 Mouse DPP
82	1166	29.0	797	6	ABP55575	Abp55575 Mouse DPP
83	1158.5	28.8	799	6	ABP55578	Abp55578 Mouse DPP
84	1152.5	28.7	691	5	ABG61612	Abg61612 Human DPR
85	1129	28.1	865	7	ADE58041	Ade58041 Human Pro
86	1129	28.1	865	7	ADE58037	Ade58037 Human Pro
87	1127	28.0	803	6	ABR58662	Abr58662 Human can
88	1127	28.0	865	9	ADX26259	Adx26259 Novel cel
89	1119	27.8	804	6	ABP55627	Abp55627 Human dpp
90	1119	27.8	865	6	ABP55626	Abp55626 Human dpp
91	1116	27.8	803	7	ADB79818	Adb79818 Rat dipep
92	1116	27.8	859	7	ADE58039	Ade58039 Rat Prote
93	1116	27.8	859	7	ADE58035	Ade58035 Rat Prote
94	1116	27.8	859	9	ADX26403	Adx26403 Novel cel
95	1112.5	27.7	745	4	ABB65409	Abb65409 Drosophil
96	1089	27.1	804	9	ADX26329	Adx26329 Novel cel
97	1038	25.8	802	4	ABB71751	Abb71751 Drosophil